SECTION 11. That Article XI, "Plumbing Code", is hereby repealed and re-enacted with amendments as follows:

ARTICLE XI. PLUMBING CODE

DIVISION 1. GENERALLY

Sec. 5-231. Definitions.

Except as set forth below and in Section 5-68, the terms used in this article shall have the same definitions as in the International Code Council (ICC) International Plumbing Code, 2009 Edition.

Approved means accepted or acceptable under an applicable specification stated or cited in this code and/or the ICC International Plumbing Code, 2009 Edition, as issued by the International Code Council, Inc., or accepted as suitable for the proposed use under the procedures and powers of the administrative authority. Oral approval by the administrative authority or his duly authorized agents shall constitute full and complete approval irrespective of the requirements of the ICC International Plumbing Code, 2009 Edition, for written approval except those circumstances wherein the master plumber shall specifically request the same in writing.

Existing work means a plumbing system or any part thereof, which has been lawfully installed prior to the adoption of this ordinance.

Plumbing official means the Chief of the Division of Inspection Services.

Sec. 5-232. Scope.

The provisions of this article shall apply to and govern plumbing as defined in this article 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 drainage facilities, the venting system, and the public or private water supply systems, within or adjacent to any building or other structure, or conveyance, also the practice and material used in the installation, maintenance, extension, or alteration of the stormwater or sewage system of any premises to their connection with any point of public disposal or other terminal.

Secs. 5-233 – 5-240. Reserved.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Sec. 5-241. Plumbing permit.

(a) No plumbing work shall be undertaken prior to the issuance of a permit therefor by the administrative authority. Such permit shall be issued to a licensed master plumber, except as provided otherwise in this article. Repairs involving only the working parts of a faucet or valve,

clearance of stoppages, repairing of leaks, or replacement of defective faucets or valves may be made without a permit provided no changes are made in the piping to the fixtures.

(b) Any permit required by this section may be issued to any person to do any work regulated by this article in a single-family dwelling used exclusively for living purpose, including the usual accessory buildings and quarters in connection with such building, provided the person is the bona fide owner of such dwelling and that the same will be occupied by the owner and that the owner shall personally purchase all material and perform all labor in connection therewith.

(c) Application for a permit shall be made on suitable form provided by the administrative authority. The application shall be accompanied by the payment of fees in the amount established by resolution.

(d) No permit shall be issued until plans and specifications showing the proposed work in necessary detail have been submitted to the administrative authority and it has been determined from examination of such plans and specifications that they give assurance that the work will be conformed to the provisions of this article. If a permit is denied, the applicant may submit revised plans and specifications without payment of additional fee.

(e) If, in the course of the work it is found necessary to make any change from the plans and specifications on which a permit has been issued, amended plans and specifications shall be submitted and a supplement permit, subject to the same conditions applicable to the original application for permit shall be issued to cover the change. Any additional permit fees for the change in work must be paid prior to permit issuance.

Sec. 5-242. Certificates of approval.

Certificates of approval issued upon the satisfactory completion and testing of a plumbing system(s) shall be in writing.

Sec. 5-243. Inspections and tests.

(a) It shall be the duty of the administrative authority to make the inspections and tests required by this article. The master plumber or his representative shall request inspections and tests following the Division's established procedure for inspection scheduling.

(b) Nothing in this article shall be construed to require actual testing of facilities when in the judgment of the administrative authority such testing is unnecessary. No testing deemed necessary by the administrative authority shall be prohibited. In the case of discretionary action in determinations of the administrative authority under the provisions of this article, the relevant facts shall be considered and determinations made in the exercise of reasonable discretion and all such determinations shall be final in the absence of abuse of discretion.

(c) Where an additional inspection under this division is made necessary by failure to complete or properly perform the work inspected, or by failure of work tested to withstand tests, such additional inspection shall not be made until the person requesting such inspection shall pay to the administrative authority the fee established by the resolution.

Sec. 5-244. Rules for protection of water supply system authorized.

The administrative authority shall make such rules and regulations in furtherance of the purposes of this article and not inconsistent with the provisions of this administrative authority, for the installation, repair or alteration of air conditioning systems, water treatment equipment, and water-operated devices as may be deemed necessary to properly protect the water supply system.

Secs. 5-245 – 5-250. Reserved.

DIVISION 3. TECHNICAL STANDARDS

Sec. 5-251. International Plumbing Code--Adopted.

The International Code Council (ICC) International Plumbing Code, 2009 Edition, as modified herein, is hereby adopted as the plumbing code for the City. One (1) copy of such publication as adopted shall be maintained by the City Clerk in the office of the Council and made available for inspection by the public during regular office hours. Any amendment or change in such publication promulgated by the International Code Council shall not become a part of this article until adopted by ordinance. References to other ordinances and codes of the City shall be interpreted and applied in accordance with the terms and effect of such ordinances and codes at the time of such application and interpretation.

Sec. 5-252. Same--Amendments.

The ICC International Plumbing Code, 2009 Edition (IPC), is amended in the following respects:

Section 101.1 of the IPC is amended to read as follows:

> **101.1 Title.** These regulations shall be known as the *Plumbing Code of the City of Rockville*, hereinafter referred to as "this code".

Section 103.1 of the IPC is deleted in its entirety.

Section 105.5.1 of the IPC is amended to read as follows:

> **105.5.1 Equipment reuse.** Equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and approved.

Section 106.3 of the IPC is amended to read as follows:

> **106.3 Application for permit.** Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and shall contain a

general description of the proposed work. The application shall be signed by the City licensed Master Plumber or if residential work, that the International Residential Code allows the homeowner to do, the homeowner can sign the application.

Section 106.5.1 of the IPC is amended to read as follows:

106.5.1 Reviewed construction documents. When the code official issues the permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "REVIEWED." Such reviewed construction documents shall not be changed, modified or altered without authorization from the code official. All work shall be done in accordance with the reviewed construction documents.

Section 106.5.3 of the IPC is amended to read as follows:

106.5.3 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within six (6) months after its issuance, or if the work authorized by such permit does not continue to progress or is abandoned for a period of six (6) months after the last approved/valid inspection. Before such work recommences, a new permit shall be first obtained and the appropriate fees shall be paid.

The fees shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work.

Exception: Water and Sewer Contribution fees will not need to be repaid.

Section 106.5.4 of the IPC is amended to read as follows:

106.5.4 Extensions. The code official can extend the time for action by the permittee if there is reasonable cause. A permittee holding an unexpired permit shall have the right to apply for an extension, in writing, for time to complete such work. The extension shall be requested for a justifiable cause. A permit shall not be extended more than once.

Section 106.6 of the IPC is amended to read as follows:

106.6 Fees. A permit shall not be issued until the fees prescribed in Section 106.6.2 have been paid.

106.6.1 Work commencing before permit issuance. Any person who commences any work on a plumbing system before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the investigation fees established by resolution of the Mayor and Council.

106.6.2 Fee schedule. The fees for all plumbing work shall be established by resolution of the Mayor and Council.

106.6.3 Fee refunds. The code official shall authorize the refunding of the full amount of any fee paid hereunder that was erroneously paid or collected.

Section 107.2 of the IPC is amended by adding No. 4 to read as follows:

4. Other inspections as deemed necessary by the code official.

Sections 107.2.4, 107.2.5.1, and *107.2.5.2* of the IPC are deleted.

Section 108.4 of the IPC is amended to read as follows:

108.4 Violation penalties. Any persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a municipal infraction. Each day that a violation continues after notice has been served shall be deemed a separate offense.

Section 109 of the IPC is to be deleted in its entirety, and replaced with the following:

109.1 Administrative Appeals. Any person aggrieved by and desirous of challenging a decision of the administrative authority in connection with the interpretation, application, or modification of any provision of this chapter relating to the manner of construction or materials used in connection with the erection, alteration, or repair of a building or structure or system installed therein, shall appeal such decision to a Board of Adjustments and Appeals. An appeal may be taken when it is claimed that:

(1) The true intent of the code or the rules legally adopted there under have been incorrectly interpreted; or

(2) The provisions of the code do not fully apply; or

(3) An equally good or better form of construction can be used.

109.2 Application for appeal. An appeal shall be filed with the City Clerk within seven (7) calendar days from the date of the administrative decision being appealed, and a copy thereof shall be submitted to the Superintendent of the Division of Licenses and Inspection. The appeal shall be in writing and shall contain a detailed statement of the reasons in support of such appeal.

109.3 Membership.

109.3.1. Number. The Board of Adjustments and Appeals shall consist of three (3) persons:

a) A licensed professional engineer or architect chosen by the administrative authority;

b) A licensed professional engineer or architect chosen by the owner of the subject building or structure; and

c) A licensed professional engineer or architect to be jointly chosen by the other two (2) members.

109.3.2 Compensation. All fees charged by the licensed professional engineers or architects to serve on the Board shall be paid for by the person appealing the administrative decision.

109.4 Meetings and Hearings. The Board of Adjustments and Appeals shall conduct a hearing on the appeal, at which time the appellant, the appellant's representative, representatives of the City who have inspected the subject building or structure or applicable system installed therein, and any other person having knowledge of the matter or whose interests may be affected by the decision on the appeal shall be given an opportunity to be heard. The hearing shall be conducted informally, and the formal rules of evidence shall not apply. The Board may accept written testimony and shall give it such weight as it deserves.

109.4.1 Interpretation. Interpretation given provisions of the applicable ICC or NFPA Code by the International Code Council or National Fire Protection Association, shall be given great deference.

109.4.2 Actions. The Board may inspect the structure or building and conduct any other investigation or research necessary in order to render a decision.

109.5 Decision. The following process shall be followed:

(1) Within fifteen (15) working days of the hearing, the Board shall affirm, modify or reverse the decision of the administrative authority.

(2) The agreement of any two (2) members of the Board shall constitute the decision of the Board. Failure to obtain the agreement of any two (2) members of the Board shall constitute a denial of the appeal and an affirmation of the decision of the administrative authority. The Board's findings and decision shall be rendered in writing and copies thereof shall be provided to the appellant and any other party who has entered their appearance before the Board and requested a copy of the decision. The decision may contain recommendations for remedial steps to be taken to meet the intent of the applicable code.

109.6 Appeal. Any person aggrieved by a decision of the Board of Adjustments and Appeals may appeal the decision to the Circuit Court for the County in accordance with the Maryland Rules as set forth in Title 7, Chapter 200.

Section 202 of the IPC is amended by deleting the definition "Individual sewage disposal system."

Section 301.3 of the IPC is amended to read as follows:

301.3 Connections to the sanitary drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8 of the IPC.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water system, as per Appendix C, for flushing of water closets and urinals or for subsurface landscape irrigation.

Sections 305.6 and *305.6.1* of the IPC are amended to read as follows:

305.6 Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed two (2) feet, six (6) inches below grade.

305.6.1 Sewer depth. Building sewers shall be a minimum of two (2) feet two (2) inches (2' 2") below grade.

Section 312.11 is added to the IPC to read as follows:

312.11 Grease and Oil Interceptors. All establishments, which are required to have grease or oil interceptors, must maintain a log indicating frequency of waste retrieval by an appropriate contractor. The log and a copy of the waste removal contract must be available at all times for inspection by the administrative authority.

Section 404.1 of the IPC is amended to read as follows:

404.1 Where required. Accessible plumbing facilities and fixtures shall be provided in accordance with the State of Maryland's Accessibility Code (COMAR 05.02.02)

Section 412.2.1 is added to the IPC to read as follows:

412.2.1 Grease interceptor required. Floor drains located within a ten (10) foot diameter of grease producing equipment shall discharge through a grease interceptor.

Exception: Floor drains located inside walk in coolers.

Section 412.5 is added to the IPC to read as follows:

Section 412.5 Fire Pump Room Drains. Each fire pump room shall be provided with a minimum of two drains located near the fire pump. Each drain shall have a minimum of 4 inch diameter opening. One drain shall be dedicated to the main drain from the pump

discharge piping and the second drain opening shall serve the accessory drain piping from the fire pump.

Section 502.1.2 is added to the IPC to read as follows:

502.1.2 Prohibited location. Fuel-fired water heaters shall not be installed in a sleeping room, bathroom, under stairs, or in a closet accessed through a sleeping room or bathroom.

Exception: A sealed combustion chamber or direct vent water heater may be installed in those locations.

Section 502.3 of the IPC is amended to read as follows:

502.3 Water heaters installed in attics. Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater. The floor/ceiling rafters supporting a water heater must be designed to accept the additional loading imposed by the water heater.

Section 603.1 of the IPC is amended to read as follows:

603.1 Size of water service pipe. The water service pipe shall be sized to supply water to the structure in the quantities and at the pressure required by this code. The minimum diameter of water service pipe shall be one (1) inch.

Exception: Repairs can be done in the existing pipe size as long as water service pipe is not completely replaced.

Table 604.4 of the IPC is amended to read as follows:

TABLE 604.4
MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY[b]
Lavatory, private	1.5 gpm at 60psi
Lavatory, public, (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head[a]	2.0 gpm at 80psi
Sink faucet	1.5 gpm at 60 psi
Urinal	0.5 gallon per flushing cycle
Water closet (tanktype)[c]	1.28 gallons per flushing cycle
Water closet (flushometer)	1.6 gallons per flushing cycle

For SI: 1 gallon per minute = 3.785 L/m,
1 pound per square inch = 6.895 kPa

a. A hand-held shower spray is a shower head.
b. Consumption tolerances shall be determined from referenced standards.
c. Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

Section 605.3 of the IPC is amended to read as follows:

605.3 Water service pipe. Water service pipe shall conform to NSF61 and the requirements of section 5-253(6) of the Rockville City Code. All water service pipe installed underground and outside of the structure, shall have a minimum working pressure rating of 160 psi (1100 kPa) at 73.4EF (23EC). Where the water pressure exceeds 160 psi (1100 kPa), piping material shall have a minimum rated working pressure equal to the highest available pressure. All ductile iron water pipe shall be cement mortar lined in accordance with AWWA C104.

Table 605.3 of the IPC is amended by deleting "asbestos cement pipe" as an approved materials for water service pipe.

Section 606.2 of the IPC is amended to read as follows:

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

1. On the fixture supply to each plumbing fixture.
2. On the water supply pipe to each sillcock.
3. On the water supply pipe to each appliance or mechanical equipment.

Section 608.16.4 of the IPC is amended by deleting Exception No. 1.

Section 708.2 of the IPC is amended to read as follows:

708.2 Cleanout plugs. Cleanout plugs shall be of brass, and shall have countersunk square heads. Cleanout plugs with borosilicate glass systems shall be of borosilicate glass.

Section 802.1.1 of the IPC is amended to read as follows:

802.1.1 Food handling. Equipment and fixtures utilized for the storage, preparation and handling of food shall discharge through an indirect waste pipe by means of an air gap. Three (3) compartment sinks required by the Montgomery Health Department that are used as a combination dishwashing and culinary sink shall discharge by means of an air gap.

Exception: This requirement shall not apply to dishwashing machines and sinks used solely for dishwashing.

Section 802.2 of the IPC is amended by to read as follows:

802.2 Installation. Indirect waste piping shall not be less than one (1) inch in diameter. All indirect waste piping shall discharge through an air gap or air break into a waste receptor or standpipe. Waste receptors and standpipes shall be trapped and vented and shall connect to the building drainage system. All indirect waste piping that exceeds 2 feet (610 mm) in developed length measured horizontally, or 4 feet (1219 mm) in total developed length, shall be trapped.

Section 1002.4.1 is added to the IPC to read as follows:

1002.4.1 Trap primers at floor drains. All floor drains with traps shall be required to have trap primers.

Section 1003 is deleted in its entirety, and replaced to read as follows:

SECTION 1003

INTERCEPTORS AND SEPARATORS

1003.1 Grease Abatement Systems - General. Grease abatement systems shall be provided to prevent the discharge of Fats, Oil, Grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes. This system shall be installed in accordance with the City's Fats, Oils, and Grease (FOG) ordinance.

1003.1.1 Applicability. The regulations in this Section shall apply to establishments where food is served to or provided for the public, with or without charge, including, but not limited to restaurants, cafeterias, hotel kitchens, church kitchens, school kitchens, hospital cafeterias, bars, or any other commercial operation that has the potential to discharge grease laden wastewater; hereafter referred to as Food Service Establishments (FSE).

1003.1.2 Definitions

1003.1.2.1 Grease Abatement System: Any grease interceptor, grease trap, grease recovery device, or any treatment system designed to remove Fats, Oils and Grease (FOG) from FSE wastewater, with two general subcategories as follows:

1003.1.2.2 Volume-Based Grease Interceptor: Grease interceptor design based on volume and retention time with no specific requirement for upstream sink tail piece flow restrictions or a flow control device. Sizing is based on the number of drainage fixture units connected to the grease interceptor. Minimum size = 300 gallons. Typically - installed outdoors and underground. Typically - cleaned by pumping contractors. Sometimes - referred to as a gravity grease interceptor or outdoor grease interceptor.

1003.1.2.3 Flow-Based Grease Interceptor: Grease interceptor design based on flow rate with a specific requirement for upstream sink tailpiece flow restriction (for indirectly connected fixtures) and a flow control device. Solids screens or strainers with a maximum screen size of 1/8" perforations must be provided to capture the solids discharge from dish/pot washing sinks and floor sinks to avoid overloading the grease interceptor with solids. Sizing is based on the reasonable maximum flow anticipated from the fixtures connected to the grease interceptor based on the WSSC Tail Piece Flow Rate Table (new) for indirect connections, and IPC Chapter 10/ASME A112.14.3 for direct connections. Minimum size = 7 gallons per minute. Flow-based grease interceptors shall conform to ASME A112.14.3 or ASME A112.14.4 at the calculated flow rate. The following flow-based grease interceptors are differentiated based on whether or not there are mechanical grease removal features:

1003.1.2.3.1. Passive Flow Based Grease Interceptor: Grease interceptor design with no mechanical grease removal features. Typically -installed indoors under a sink or outdoors in-ground. Cleaned by the FSE or pumping contractors. Sometimes referred to as a hydro-mechanical grease interceptor (when designed and installed with a flow control device with air intake) or a grease trap (when designed and installed with a flow control device without air intake).

1003.1.2.3.2. Mechanical Flow Based Grease Interceptor: Grease interceptor design with mechanical grease removal features. Typically - installed indoors under a sink. Cleaned and maintained by the FSE, contractors, or specialty maintenance contractors. Sometimes - referred to as a grease removal (or recovery) device.

1003.2 Where Required.

1003.2.1 Grease abatement system required. A grease abatement system shall be required to receive the drainage from fixtures and equipment with potential grease-laden waste. Fixtures and equipment shall include, but not be limited to: pot sinks; pre-rinse sinks; soup kettles or similar devices; fresh meat cutting and prepping; wok stations; floor drains; floor sinks; automatic hood wash units; and dishwashers.

1003.2.2 Flow Based Grease Interceptors. Flow Based Grease Interceptors shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged.

1003.2.3 Volume Based Grease Interceptors. Volume Based Grease Interceptors shall receive the discharge of the entire kitchen and shall be sized accordingly.

> **Exception:** Waste from sinks or fixtures with permitted food waste disposers shall discharge directly to the sanitary drainage system.

1003.2.4 Responsibility. Property owners of commercial properties, or their official designee(s), shall be responsible for the installation and maintenance of grease abatement systems serving multiple Food Service Establishments that are located on a single parcel.

1003.3 Where Not Required - Conditional Variance (Existing FSEs Only).

1003.3.1 Conditional Variance. At the request of the FSE, the Permitting Authority may grant a conditional variance of the grease abatement system requirements if, in the judgment of the Permitting Authority, there is limited potential for FOG in the discharge when considering, including but not limited to, the frequency of operation, the miscibility of the discharge, the volume of flow and the potential for fats, oils and grease discharge based upon the menu.

1003.3.1.2 Revocation. The conditional variance can be revoked due to an actual blockage or sanitary sewer overflow attributed to the FSEs FOG discharge.

1003.3.1.3 Additional requirements. This conditional variance applies to the requirement to install a grease abatement system only. FSEs granted this variance may still be required to obtain a wastewater discharge permit and will be subject to regular inspections.

1003.4 Prohibited Connections

1003.4.1 Human waste. Waste from bathrooms or similar fixtures conveying human waste shall connect directly to the building sanitary drain, and shall not connect through any grease abatement system.

1003.4.2 Signage required. Where fixtures not generally subject to grease, such as fruit and vegetable washing sinks, connect to the regular building drain, a permanent engraved sign shall be posted at such sinks indicating their limited use. (Example: "VEGETABLE WASHING ONLY" or "NO GREASE").

1003.4.3 Food Waste Disposers. Food Waste Disposers shall not be installed on any fixture that requires grease abatement.

1003.4.4 Pumps. All grease abatement systems shall receive only stabilized flow from gravity-flow grease waste collection systems and shall not receive pressurized discharge such as from sewage pumps or lift stations. Where pumping is required, grease must be separated prior to the lift station.

1003.5 Flow Based Grease

1003.5.1 General

1003.5.1.1 Approval. The location, size and piping details shall require plan approval prior to installation.

1003.5.1.2 Specifications. Flow-based grease interceptors shall conform to ASME A112.14.3 and/or ASME A112.14.4 and shall be installed in accordance with manufacturer's specifications.

1003.5.1.3 Flow-control device. The manufacturer required flow control device shall be installed, sized to match the interceptors flow rate, and shall be readily accessible for inspection, cleaning and maintenance. The flow-control device shall be vented and terminate not less than 6 inches (152 mm) above the flood rim level or be installed in accordance with the manufacturer's instructions.

1003.5.1.4 Solids screening. Solids screens or strainers with a maximum of 1/8" perforations shall be provided to capture the solids discharge from dish/pot washing sinks and floor sinks to minimize the solids loading on flow-based grease interceptors.

1003.5.2 Location And Installation

1003.5.2.1 Location. Flow-based grease interceptors shall be installed below grade, direct buried, where listed for such application or within a vault; or indoors within a conditioned space; or in accordance with manufacturer's requirements. Mechanical flow-based interceptors shall not be installed in a vault.

1003.5.2.2 Access. Flow-based grease interceptors shall be readily accessible for daily maintenance, servicing and inspection.

1003.5.2.3 Headroom. Headroom above flow-based grease interceptors as well as solid sediment strainers shall be sufficient to fully open lid and easily remove internal components.

1003.5.2.4 Flow control device. The flow control device shall be accessible for maintenance.

1003.5.3 Sizing

1003.5.3.1 Directly Connected Fixtures. For sinks, fixtures and drains directly connected to a flow-based grease interceptor (no requirement for an air gap), flow-based grease interceptor sizing shall be determined pursuant to IPC 1003.3.4, and shall conform to ASME A112.14.3.

1003.5.3.2 Indirectly Connected Fixtures. For sinks, fixtures and drains indirectly connected to a flow-based grease interceptor (air gap required), a restricted flow tail piece is required and the flow-based grease interceptor shall be sized utilizing Table 1003.a and Table 1003.b.

1003.5.3.3 Single indirectly connected fixture flow rate. For a single indirectly connected fixture served by a flow-based grease interceptor, the full tail piece flow rate from Table 1003.a shall be used.

1003.5.3.4 Multiple indirectly connected fixtures flow rates. For multiple indirectly connected fixtures served by a single flow-based grease interceptor, fixtures with the highest flow rates shall be considered first, with the full tail piece flow rates for the two highest flow fixtures/drains, 1/2 of the tail piece flow rates for the next two highest flowing fixture/drains, and 1/4 of the tail piece flow rates for each subsequent fixtures/drains shall be used (see Table 1003.b below).

1003.5.3.5 Combination flow rates. Flow-based grease interceptors serving both indirectly and directly connected sinks, fixtures and/or drains shall be sized based on a proper combination of the methods listed above.

Table 1003.a
Flow Rates for Various Drain Tail Piece Sizes

Tail Piece Diameter	Flow Rate
1/2"	7 gpm
3/4"	12 gpm
1"	20 gpm
1-1/4"	30 gpm
1-1/2"	40 gpm
2"	65 gpm

Table 1003.b
Multiple Indirect Connection Flow Factor Table

Fixture/Drain #1	Full Tail Piece Flow Rate
Fixture/Drain #2	Full Tail Piece Flow Rate
Fixture/Drain #3	1/2 Tail Piece Flow Rate
Fixture/Drain #4	1/2 Tail Piece Flow Rate
All additional Fixtures/Drains	1/4 Tail Piece Flow Rate

Note: Each tub/basin of multi-compartment sinks shall be counted as individual fixtures.

1003.6 Volume Based Grease Interceptors

1003.6.1 General

1003.6.1.1 Volume-Based Grease interceptors. Volume-Based Grease interceptors shall be designed and installed in accordance with current City details.

1003.6.1.2 Approval. The location, size and piping details shall require plan approval prior to installation.

1003.6.1.3 Specifications. Precast Concrete interceptors shall conform to the structural requirements contained in ASTM 1613 Standard Specification for Precast Concrete Interceptor Tanks

1003.6.2. Location

1003.6.2.1 In general. In general, volume-based grease interceptors shall be located below grade outdoors or indoors; or above grade indoors where listed for such applications and within a conditioned space.

1003.6.2.2 Access. Volume-based grease interceptors shall be readily accessible for daily maintenance, servicing and inspection.

1003.6.2.3 Manholes and cleanouts. Manholes and cleanouts shall be readily accessible for convenient inspection and maintenance.

1003.6.2.4 Kept clear of structures. No structures shall be placed directly upon or over the Interceptor.

1003.6.2.5 Indoor installation. Where an outdoor location is not possible or is impractical, volume-based interceptors may be installed indoors within twenty (20) feet of an accessible service entrance, unless otherwise approved.

1003.6.3 Sizing. The volume of the interceptor shall be determined by using table 1003.c. If the drainage fixture units (DFUs) are not known, the interceptor shall be sized based on the maximum DFUs allowed for the pipe size connected to the inlet of the interceptor.

Table 1003.c
Volume-Based Grease Interceptor Sizing
(from 2006 Uniform Plumbing Code Table 10-3)

DFUs[1]	Interceptor Volume
8	500 gallons
21	750 gallons
35	1,000 gallons
90	1,250 gallons
172	1,500 gallons
216	2,000 gallons
307	2,500 gallons
342	3,000 gallons
428	4,000 gallons
576	5,000 gallons
720	7,500 gallons
2,112	10,000 gallons
2,640	15,000 gallons

Notes:
1. The maximum allowable DFUs plumbed to the kitchen drain lines that will be connected to the grease interceptor.

1003.7 Scale trap seafood prep sinks. Scale trap seafood prep sinks shall discharge through a local scale separator prior to entering any portion of the drainage system or grease abatement system.

1003.8 Oil & Sand Separators Required

1003.8.1 General. All oil and sand interceptor details shall be approved in writing prior to installation and shall meet industrial waste discharge limitations.

1003.8.2 Size. Oil and sand interceptor size shall be determined by application as follows:

Small Interceptor - 64 cu. ft.

Large Interceptor - 216 cu. ft.

1003.8.3 Parking Garages. Parking garages not open to the outdoors and protected from surface and storm water run-off may have inside floor and trough drains connected to the sanitary sewer through an interceptor. Parking garages without wash down facilities may be served by a small interceptor; those with wash down facilities shall be served by a large interceptor.

1003.8.4 Vehicle Washing Establishments. All vehicle washing facilities shall have required drains connected to the sanitary drainage system through a large interceptor.

1003.8.5 Vehicle Service Stations. Vehicle service stations, maintenance and service garages, etc., shall have all required inside floor and trough drains connected to the sanitary drainage system through an interceptor.

a. Up to four (4) bays may be served by a small interceptor.
   Up to sixteen (16) bays may be served by a large interceptor.

b. No more than one (1) business shall be served by an interceptor.

c. Facilities providing vehicle lubrication service shall be supplemented by a manufactured oil separator with a used oil holding tank.

1003.9 Laundries. Laundry facilities not installed within an individual dwelling unit or intended for individual family use shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the drainage system of solids 0.5 in (12.7 mm) or larger in size, string, rags, buttons or other materials detrimental to the public sewage system.

1003.10 Bottling Establishments. Bottling plants shall discharge process wastes into an interceptor that will provide for the separation of broken glass or other solids before discharging waste into the drainage system.

1003.11 Venting of interceptors and separators. Interceptors and separators shall be designed so as not to become air bound where tight covers are utilized. Each interceptor or separator shall be vented where subject to a loss of trap seal.

1003.12 Access and maintenance of interceptors and separators. Access shall be provided to each interceptor and separator for service and maintenance. Interceptors and separators shall be maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator.

Section 1101.2 of the IPC is amended to read as follows:

1101.2 Where required. When approved, stormwater may be discharged from roofs, paved areas, yards, courts, courtyards, downspouts, rain barrels, cisterns or rooftop storage facilities to vegetated areas such as lawns, gardens, grassy swales or bioretention cells on the same single record lot. In such instances, the stormwater shall flow away from the building and shall not flow over property lines onto adjacent lots unless it runs into existing natural water courses; otherwise, stormwater shall discharge to an approved place of disposal or into a separate storm sewer.

Appendix A Plumbing Permit Fee Schedule of the IPC is deleted in its entirety.

Appendix C Gray Water Recycling Systems of the IPC is to be adopted in its entirety.

Appendix H is added to the IPC to incorporate *The Washington Suburban Sanitary Commission (WSSC) Manual of Standards.*

Appendix I is added to the IPC to incorporate *The City of Rockville standards for Identifications of Storm and Sanitary Discharge Lines*

Sec. 5-253. Same--Exceptions and supplemental standards.

The following apply to all installations, repairs, and alterations of plumbing and subject to the provisions of this article, anything to the contrary contained in the ICC International Plumbing Code, 2009 Edition or the International Residential Code, 2009 Edition, notwithstanding. It is the intent of the City to provide supplemental regulations and exceptions to the ICC International Plumbing Code, 2009 Edition, and the International Residential Code, 2009 Edition.

(1) *Fittings.* No changes in direction in drainage piping shall be made by the use of short sweep bends without specific approval of the administrative authority having been first had and obtained;

(2) *Depth of building sewer and water service (outside of buildings).* Sewers and water servicing pipe shall be installed below the recorded frost penetration, but in no case less than two (2) feet, two (2) inches for sewer and two (2) feet, six (6) inches for water piping below grade;

(3) *Water heating equipment.* A shutoff valve shall be provided in the cold water branch line to each water storage tank or each water heater. The shutoff valve so provided shall be protected from accidental closing and tampering;

(4) *Subdrains and storm sewers.* No building wall sub-drains, areaway, driveway or roof leaders shall be connected to the sanitary sewer. Such drain systems shall be separately connected to an independent dry well drainage system, to a storm sewerage system, or drained by some other method approved by the administrative authority;

(5) *Building sewer and sanitary drainage system.* The administrative authority may require the use of cast-iron pipe for the installation of the sanitary drainage system and the building sewer if unstable soil or other conditions warrant such use. A cleanout and brass plug with a countersunk head shall be installed as near the property line as possible. A #12 copper wire, with the end accessible at the cleanout, shall be taped to all nonmetallic sewer laterals to provide a means of locating the lateral by a metal detector or other device. An approved adaptor shall be used to provide connection between piping of different size, weight, and material;

(6) *Water service pipe and water distribution pipe.* Water service pipe installed underground between the City's main and the property line and from the property line to the structure to be supplied shall be type "K" copper tubing with flare fittings only for sizes up to and including two (2) inches. In the event type "K" copper tubing is unavailable, type "L" copper tubing may be used in an emergency when authorized by the

City. Sizes three (3) inches and above shall be of cast-iron pressure pipe, suitable for conditions to which it will be subjected;

(7) *Fixture shutoff valves.* Each plumbing fixture shall be equipped with an accessible shutoff valve to interrupt water supply for servicing.

(8) *Water-cooled air conditioning, refrigeration machinery and compressor installations.*

a) Rate and Use of Cooling Water. All water-cooled air conditioning, refrigeration machinery and compressor installations using water from the public water supply for cooling purposes or discharging water into the City's sewerage or drainage systems, shall be installed in accordance with these regulations, and shall be subject to the City's inspection and approval. A written permit will be required for each installation. Such installations will be permitted to take water from the City's system at a rate not greater than 0.08 gallon per minute per ton of refrigeration. An approved type of economizer or cooling tower shall be installed if necessary to meet this limitation;

b) Rating of Water-Cooled Machinery. A ton of refrigeration shall be considered as the cooling effect of two hundred (200) BTU's per minute. The standard rating of refrigeration machines is expressed as the number of tons of refrigeration it can produce under certain conditions. For compressors, one (1) horsepower of rated capacity will be considered equivalent to one (1) ton of refrigeration;

c) Disposal of Cooling Water. Water from any such above installation, whether or not the water is taken from the City's system, shall not be discharged into the City's sanitary sewerage system at a rate greater than 0.08 gallon per minute per ton of refrigeration;

d) Cross-Connections. All such installations shall be installed without cross-connections and without possibility of back-siphonage;

e) Installation to Conform. All water-cooled air conditioning equipment, refrigeration machinery and compressor installations using water from, or discharging water into, the City's system, whether or not installed prior to the adoption of this section, where required, shall be modified to bring them into conformance with the provisions of these regulations;

f) Penalty for Nonconformance. Properties in which water-cooled air conditioning equipment, refrigeration machinery, and compressor installations are made contrary to the provisions of this section and which installations are not promptly modified as directed, will be disconnected from the City's system until the requirements of this section are complied with.

Secs. 5-254 – 5-260. Reserved

DIVISION 4. LICENSING OF PLUMBERS

Sec. 5-261. License required; plumbing work by unqualified person declared misdemeanor.

(a) No person shall engage in the business of plumbing in the City unless licensed as a master plumber under the provisions of this division.

(b) No person shall engage in the business of installing, repairing, or altering plumbing unless the plumbing work performed in the course of such business is under the direct supervision of a licensed master plumber.

(c) Any person who shall perform any plumbing work within the City which is not by or under the supervision of a licensee as provided in this section or otherwise qualified pursuant to section 5-241 shall be guilty of a misdemeanor.

(d) All company vehicles, by July 1, 2010, shall have the City's license number displayed so to be visible from the street.

Sec. 5-262. Qualifications; examinations.

(a) The administrative authority shall establish standards and procedures for the qualifications, and licensing of master plumbers. The administrative authority shall issue an appropriate license to each person who meets the qualifications thereof. The administrative authority shall keep an official record of all licenses issued.

(b) The administrative authority shall issue a Master Plumber license when an applicant presents a valid license issued by the State of Maryland Plumbing License Board. The applicant's license must indicate that a Master Plumber's license has been issued by the State and that the individual is insured for work.

(c) No license shall be granted to any person under the age of twenty-one (21) years.

Sec. 5-263. Fee.

A license shall be issued under this division to qualified applicants only upon payment of a fee in the amount established by resolution.

Sec. 5-264. Term.

Licenses required by this division shall expire at the end of the calendar year for which they were issued.

Sec. 5-265. Bond.

Individuals who hold a valid Maryland State Master Plumber's license are exempt from bond or insurance requirements.

Sec. 5-266. Use of licensee's name by another; change of address, etc.

No person who has obtained a plumber's license shall allow his name to be used by another person either for the purpose of obtaining permits, or for doing business or work under