

BALTIMORE CITY COUNCIL COMMITTEE ON ECONOMIC AND COMMUNITY DEVELOPMENT

Mission Statement

On behalf of the Citizens of Baltimore City, the Committee on Economic and Community Development (ECD) is responsible for supporting strong thriving communities ECD will review proposed zoning and land use changes, tackle issues related to economic development, oversee housing policy, and promote equitable economic opportunity for all Baltimore residents.

The Honorable Sharon Green Middleton

PUBLIC HEARING

May 4, 2021 2:00 PM Virtual Webex Meeting

City Council Bill #21-0040

Floodplain Management Code – Revision

CITY COUNCIL COMMITTEES

ECONOMIC AND COMMUNITY DEVELOPMENT

<u>(ECD)</u>

Sharon Green Middleton, Chair John Bullock Mark Conway Ryan Dorsey Antonio Glover Odette Ramos Robert Stokes *Staff: Jennifer Coates*

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Eric Costello, Chair Kristerfer Burnett Ryan Dorsey Danielle McCray Sharon Green Middleton Isaac "Yitzy" Schleifer Robert Stokes Staff: Marguerite Currin

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RULES AND LEGISLATIVE OVERSIGHT (OVERSIGHT)

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BILL SYNOPSIS

Committee: Economic and Community Development

Bill: 21-0040

Floodplain Management Code - Revision

Sponsor: President – Administration (Department of Planning) *Introduced:* February 22, 2021

Purpose:

For the purpose of modifying the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law; incorporating certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers; defining and redefining certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting and conforming certain obsolete nomenclature; providing for a special effective date; and generally relating to the protection, maintenance, and enhancement of the public health, safety, and welfare through floodplain management.

Effective: Date of enactment

Agency Reports	
City Solicitor	Favorable/Comments
Office of Sustainability	Favorable
Planning Commission	Favorable
Board of Municipal Zoning Appeals	
Department of Housing and Community Development	Favorable
Department of Finance	



Analysis

Current Law

Article 7 - Natural Resources; Division I - Floodplain Management; Baltimore City Code; (Edition 2000)

Article 32 – Zoning; Sections 4-203, 7-301, 7-304(b); Baltimore City Code; (Edition 2000)

Article - Building, Fire, and Related Codes; Section(s) 2-103 (BC §§ 107.2.1, 110.3.3, 1603.1.7) and 10-102 (RC § 109.1.3 and Table 301.2(1)); Baltimore City Revised Code; (2020 Edition)

Background

National Flood Insurance Program

The National Flood Insurance Program (NFIP) is managed by the Federal Emergency Management Agency (FEMA) and is delivered to the public by a network of approximately 60 insurance companies and the NFIP Direct Program. The NFIP works with communities required to adopt and enforce floodplain management regulations that help mitigate flooding effects.

The benefit of NFIP participation is that the program makes available federally subsidized flood insurance to properties located in member jurisdictions. Flood insurance is available to anyone living in one of the 23,000 participating NFIP communities.

Most homeowners' insurance policies do not cover flood damage. Flood insurance is a separate policy that can cover buildings, the contents in a building, or both. The NFIP provides flood insurance to property owners, renters and businesses. Homes and businesses in high-risk flood areas with mortgages from government-backed lenders are required to have flood insurance.

Maryland Department of the Environment NFIP Requirements

All Maryland counties and 92 municipalities participate in the National Flood Insurance Program (NFIP). Local governments must adopt ordinances to manage development within 100-year floodplains to prevent increased flooding and minimize future flood damage. Floodway and Flood Insurance Rate Maps (FIRM) published by the Federal Emergency Management Agency (FEMA) are used to delineate the 100-year floodplain and identify regulated land.

The NFIP requires counties and towns to issue permits for all development in the 100-year floodplain. Development is broadly defined to include any man-made change to land, including grading, filling, dredging, extraction, storage, subdivision of land, and the construction or improvement of structures. If state and federal permits are required, development may not begin until all necessary permits are issued. Proposed development must not increase flooding or create a dangerous situation during flooding, especially on another person's property. If a structure is involved, it must be constructed to minimize damage during flooding.

Baltimore City Flood Management

The Baltimore Office of Sustainability (BOS) is tasked with implementing and enforcing the City's National Flood Insurance Program (NFIP). The City must adopt the new DFIRM and Code update by the deadline in order to maintain its participation in the National Flood Insurance Program. The City's participation in the FEMA's Community Rating System program (*see brochure attached*), which provides discounts on federally subsidized flood insurance rates, also depends on the new DFIRM and updated Code becoming effective by June 16, 2021.

Bill 21-0040

The Maryland Department of the Environment requires the revisions proposed in Council Bill 21-0040 if the City is to remain in compliance with the requirements of the NFIP administered by the FEMA. These changes were necessary due to revisions to FEMA's Flood Insurance Rate Maps and associated Flood Insurance Study.

Bill 21-0040 would modify the City laws governing floodplain management to meet or exceed requirements for eligibility in the NFIP and other requirement of Federal and State law. It incorporates certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers and defines and redefines certain terms, and repeals redundant, obsolete, or otherwise superfluous provisions. The bill corrects and conforms certain obsolete nomenclature.

The bill also proposes text amendments to Article 32 - Zoning Code. The bill would exclude "golf courses" from the list of recreational facilities allowed as a use in the floodways of a "Floodplain Overlay Zoning District." The bill would allow athletic fields and parks to remain as allowed uses.

The bill provides for an immediate effective date.

Additional Information

Fiscal Note: Not Available

Information Source(s): Reporting Agencies, Bill 21-0040, Federal Emergency Management Agency, Maryland Department of the Environment

Analysis by: Analysis Date: Jennifer L. Coates April 29, 2021 Direct Inquiries to: 410-396-1260

CITY OF BALTIMORE COUNCIL BILL 21-0040 (First Reader)

Introduced by: The Council President At the request of: The Administration (Department of Planning) Introduced and read first time: February 22, 2021

Assigned to: Economic and Community Development Committee

REFERRED TO THE FOLLOWING AGENCIES: City Solicitor, Planning Commission, Board of Municipal and Zoning Appeals, Sustainability Commission, Department of Housing and Community Development, Department of Finance

A BILL ENTITLED

exceed

AN ORDINANCE concerning 1

2	Floodplain Management Code – Revision
3	FOR the purpose of modifying the City laws governing floodplain management to meet or exceed
4	requirements for eligibility in the National Flood Insurance Program and other requirements
5	of Federal and State law; incorporating certain flood-resistant design and construction
6	standards adopted by the American Society of Civil Engineers; defining and redefining
7	certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting
8	and conforming certain obsolete nomenclature; providing for a special effective date; and
9	generally relating to the protection, maintenance, and enhancement of the public health,
10	safety, and welfare through floodplain management.
11	By repealing and re-ordaining, with amendments
12	Article 7 - Natural Resources
13	Division I - Floodplain Management
14	Baltimore City Code
15	(Edition 2000)

- By repealing and re-ordaining, with amendments 16
- Article 32 Zoning 17
- Sections 4-203, 7-301, 7-304(b) 18
- Baltimore City Code 19
- (Edition 2000) 20

By repealing and re-ordaining, with amendments 21

- Article Building, Fire, and Related Codes 22
- Section(s) 2-103 (BC §§ 107.2.1, 110.3.3, 1603.1.7) and 10-102 (RC § 109.1.3 and Table 23
- 24 301.2(1))

- Baltimore City Revised Code 25
- (2020 Edition) 26

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

SECTION 1. BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF BALTIMORE, That
the Maryland General Assembly, in Md. Code Ann., Land Use Article, Title 4, has established as
policy of the State that the orderly development and the use of land and structures requires
comprehensive regulation through the implementation of planning and zoning control, and that
planning and zoning controls must be implemented by local government, in order to, among
other purposes, secure the public safety, promote health and general welfare, and promote the
conservation of natural resources. Therefore, the Mayor and City Council of Baltimore does
hereby adopt the following floodplain management regulations.
SECTION 2 AND DE LE EXECUER ODD (D) ED That the Large of Daltimore Citer and an
SECTION 2. AND BE IT FURTHER ORDAINED, That the Laws of Baltimore City read as
follows:
Poltimore City Code
Baltimore City Code
Article 7. Natural Resources
An ticle 7. Avatur at Resources
Division I. Floodplain Management

- 14 § 1-1. Definitions In general.
- 15 In this Division I, the following terms have the meanings indicated.

16 § 1-2. Definitions – "Accessory structure" to "Floodplain District".

- 17 (a) Accessory structure.
- 18 "Accessory structure" means a detached structure:
- 19 (1) that is usable solely for parking vehicles or limited storage;
- 20 (2) that is on the same parcel of property as the principal structure;
 - (3) that is no larger than 300 square feet and 1 story; and
 - (4) the use of which is incidental to the use of the principal structure.
 - (b) Actual start of construction.
- 24 See "new construction".
- 25 (c) ASCE 24.

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- "ASCE 24" means THE MOST CURRENT EDITION OF ASCE/SEI 24, "Flood Resistant Design and Construction" (American Society of Civil Engineers).
- 28 (d) Base flood.
- 29 "Base flood" means a flood that has a 1% chance of being equaled or exceeded in any
 30 given year.

1	(e) Base-flood elevation.
2	(1) In general.
3 4 5 6 7	["Base-flood elevation" means the water surface elevation of the base flood in relation to the datum specified on the Flood Insurance Rate Map.] "BASE-FLOOD ELEVATION" MEANS THE ELEVATION OF SURFACE WATER RESULTING FROM A FLOOD THAT HAS A 1% CHANCE OF EQUALING OR EXCEEDING THAT LEVEL IN ANY GIVEN YEAR.
8	(2) Areas of shallow flooding.
9 10 11	In areas of shallow flooding, "base-flood elevation" means the highest natural elevation of the ground surface, prior to construction, that is adjacent to the proposed foundation of a structure; plus:
12	(i) the depth number specified in feet on the Flood Insurance Rate Map; or
13	(ii) if the depth number is not specified, 4 feet.
14	(f) Basement.
15 16 17	"Basement" means any area of THE BUILDING, INCLUDING ANY SUNKEN ROOM OR SUNKEN PORTION OF A ROOM, HAVING ITS FLOOR BELOW GROUND LEVEL ON ALL SIDES. [a structure having its floor subgrade (below ground level) on all sides.]
18	(G) COASTAL A ZONE.
19 20 21 22 23 24 25	"COASTAL A ZONE" MEANS AN AREA WITHIN A SPECIAL FLOOD HAZARD AREA, LANDWARD OF A COASTAL HIGH HAZARD AREA (V ZONE) OR LANDWARD OF A SHORELINE WITHOUT A MAPPED COASTAL HIGH HAZARD AREA, IN WHICH THE PRINCIPAL SOURCE(S) OF FLOODING ARE ASTRONOMICAL TIDES AND STORM SURGES, AND IN WHICH, DURING BASE FLOOD CONDITIONS, THE POTENTIAL EXISTS FOR BREAKING WAVES WITH HEIGHTS GREATER THAN OR EQUAL TO 1.5 FEET. THE INLAND LIMIT OF THE COASTAL A ZONE MAY BE DELINEATED ON FIRMS AS THE LIMIT OF MODERATE WAVE ACTION (LIWMA).
26	(H) [(g)] Design flood.
27 28	"Design flood", AS USED IN ASCE 24, MEANS [is] the greater of the following two flood events:
29 30 31	(1) AREA WITHIN A FLOODPLAIN SUBJECT TO A 1% OR GREATER CHANCE OF FLOODING IN ANY YEAR [the base flood affecting areas] AS identified on the Flood Insurance Rate Map as A Special Flood Hazard [Areas] AREA; [and] OR
32 33 34	(2) AREA DESIGNATED AS A FLOOD HAZARD AREA ON A COMMUNITY'S FLOOD HAZARD MAP OR OTHERWISE LEGALLY DESIGNATED [the flood corresponding to the Flood Resilience Area].

1	(I) [(h)] Design-flood elevation.
2 3 4	"Design-flood elevation", [as used in this Division I and] as used in ASCE 24 for application to the City, means the elevation of the design flood, including wave height, relative to the datum specified on the [FIRM] FLOOD HAZARD MAP.
5	(J) [(i)] Development.
6	(1) In general.
7	"Development" means:
8	(I) any man-made change to improved or unimproved real estate; or
9	(ii) the subdivision of land.
10	(2) Inclusions.
11 12 13 14 15 16 17	"Development" includes any construction, reconstruction, modification, extension, or expansion of [buildings or other] structures, placement of fill or concrete, construction of new or replacement infrastructure, temporary development, placement of manufactured homes or buildings, dumping, mining, dredging, grading, paving, drilling operations, storage of EQUIPMENT, VEHICLES, materials OR PRODUCTS, land excavation, land clearing, land improvement, land fill operation, or any combination of these.
18	(K) [(j)] Dry floodproofing.
19	See "floodproofing".
20	(L) [(k)] <i>Elevation</i> [certificate] CERTIFICATE.
21	(1) In general.
22 23 24	"Elevation [certificate] CERTIFICATE" means a certification, in the form and containing the information required by the Federal Emergency Management Agency, of the elevations of a structure and its improvements.
25	(2) By whom and how prepared.
26 27 28	An [elevation certificate] ELEVATION CERTIFICATE may only be prepared and certified by a licensed land surveyor OR PROFESSIONAL ENGINEER, using Mean Sea Level as established by the North American Vertical Datum of 1988 ("NAVD").
29	(M) [(l)] Fair market value.
30	(1) In general.
31 32	"Fair market value" means the price at which THE IMPROVEMENT PORTION OF THE property will change hands between a willing buyer and a willing seller, neither of

1 2	which is under compulsion to buy or sell and both of which have reasonable knowledge of relevant facts.
3	(2) By whom determined.
4	For purpose of this Division I, the fair market value of a structure is determined by:
5	(i) a licensed real estate appraiser; or
6 7	(ii) the most recent, fully phased-in assessed value of the structure, as determined by the Maryland Department of Assessments and Taxation.
8	(N) [(m)] <i>FEMA</i> .
9	"FEMA" means the Federal Emergency Management Agency.
10	(O) [(n)] <i>FIRM</i> .
11	See "Flood Insurance Rate Map".
12	(P) [(o)] <i>FIS</i> .
13	See "Flood Insurance Study".
14	(Q) [(p)] <i>Flood</i> .
15 16	"Flood" means a GENERAL AND temporary CONDITION OF PARTIAL OR COMPLETE inundation of normally dry land areas from:
17	(1) the overflow of inland or tidal waters; or
18	(2) the unusual and rapid accumulation or runoff of surface waters from any source.
19	See also "base flood" and "design flood".
20	(R) [(q)] <i>Flood elevation</i> .
21	See "base-flood elevation", "design-flood elevation", and "flood-protection elevation".
22	(S) [(r)] Flood hazard area.
23	See "Regulated Flood Hazard Area" and "Special Flood Hazard Area".
24	(T) [(s)] Flood Insurance Rate Map[;] (FIRM).
25 26 27 28 29	"Flood Insurance Rate Map" OR "FIRM" means AN OFFICIAL MAP ON WHICH THE FEDERAL EMERGENCY MANAGEMENT AGENCY HAS DELINEATED SPECIAL FLOOD HAZARD AREAS TO INDICATE THE MAGNITUDE AND NATURE OF FLOOD HAZARDS, TO DESIGNATE APPLICABLE FLOOD ZONES, AND TO DELINEATE FLOODWAYS, IF APPLICABLE. FIRMS THAT HAVE BEEN PREPARED IN DIGITAL FORMAT OR CONVERTED TO DIGITAL FORMAT ARE

1 2	REFERRED TO AS DIGITAL FIRMS (DFIRM) [the official map that depicts the Regulated Flood Hazard Areas subject to this Division I].
3	(U) [(t)] Flood Insurance Study[;] (FIS).
4 5 6	"Flood Insurance Study" OR "FIS" means the official report in which the Federal Emergency Management Agency has provided flood profiles, floodway information, and water surface elevations.
7	(V) [(u)] <i>Flood-protection elevation</i> .
8 9	"Flood-protection elevation" IS: [means the minimum elevation requirements of ASCE 24, plus freeboard.]
10 11	(1) THE BASE FLOOD ELEVATION PLUS 2 FEET OF FREEBOARD IN THE NON-TIDAL FLOODPLAIN; AND
12 13 14	(2) THE MODELED ELEVATION OF THE 0.2% CHANCE OF FLOOD PLUS 2 FEET OF FREEBOARD IN THE TIDAL FLOODPLAIN AS LISTED ON THE FLOOD INSURANCE STUDY (TABLE 4).
15	(W) [(v)] Floodplain.
16 17	"Floodplain" means ANY LAND AREA AND WATERCOURSE, SUSCEPTIBLE TO PARTIAL OR COMPLETE INUNDATION BY WATER FROM ANY SOURCE, INCLUDING:
18 19	(1) a relatively flat or low land area adjoining a river, stream, or watercourse that is subject to partial or complete inundation;
20 21	(2) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source; or
22	(3) an area subject to tidal surge or extreme tides.
23	(X) [(w)] Floodplain District.
24 25	"Floodplain District" means the District, and its constituent subdistricts, established under Subtitle 2 {"Floodplain District"} of this article.
26	§ 1-3. Definitions – "Floodproofing" to "Wet floodproofing".
27	(a) <i>Floodproofing</i> .
28	(1) In general.
29 30 31 32 33	"Floodproofing" means any [combination of structural or non-structural adjustments, changes, or actions that reduce or eliminate flood damage to a structure, its contents, and its attendant utilities and equipment] COMBINATION OF STRUCTURAL AND NONSTRUCTURAL ADDITIONS, CHANGES, OR ADJUSTMENTS TO BUILDINGS OR STRUCTURES THAT REDUCE OR ELIMINATE FLOOD DAMAGE TO REAL ESTATE OR

1	IMPROVED REAL PROPERTY, WATER AND SANITARY FACILITIES, STRUCTURES AND
2	THEIR CONTENTS, SUCH THAT THE BUILDINGS OR STRUCTURES ARE WATERTIGHT WITH
3	WALLS SUBSTANTIALLY IMPERMEABLE TO THE PASSAGE OF WATER AND WITH
4	STRUCTURAL COMPONENTS HAVING THE CAPABILITY OF RESISTING HYDROSTATIC AND
5	HYDRODYNAMIC LOADS AND EFFECTS OF BUOYANCY.
5	
6	(2) Methods of floodproofing.
7	For purposes of this Division I, the two methods of floodproofing are as follows:
8	(i) "Dry floodproofing", which is the floodproofing method that, as specified in
8 9	
	ASCE 24, is used to render a structure's envelope substantially impermeable
10	to the entrance of floodwaters] IS A COMBINATION OF MEASURES THAT
11	RESULTS IN A STRUCTURE, INCLUDING THE ATTENDANT UTILITIES AND
12	EQUIPMENT, BEING WATERTIGHT WITH ALL ELEMENTS SUBSTANTIALLY
13	IMPERMEABLE AND WITH STRUCTURAL COMPONENTS HAVING THE CAPACITY
14	TO RESIST FLOOD LOADS, AS SPECIFIED IN ASCE 24; and
15	(ii) "Wet floodproofing" is the floodproofing method that, as specified in the
16	following FEMA Technical Bulletins AND ON ASCE 24, relies on the use of
17	flood damage-resistant materials and construction techniques IN AREAS OF A
	STRUCTURE THAT ARE BELOW THE FLOOD PROTECTION ELEVATION REQUIRED
18	
19	BY THIS STANDARD BY INTENTIONALLY ALLOWING THOSE AREAS TO FLOOD [to
20	minimize flood damage to areas below the design-flood elevation of a
21	structure]:
22	(A) FEMA Technical Bulletin 2 {"Flood Damage-Resistant Material
23	Requirements for Buildings Located in Special Flood Hazard Areas in
24	accordance with the National Flood Insurance Program"}; and
25	(B) FEMA Technical Bulletin 7 {"Wet Floodproofing Requirements for
26	Structures Located in Special Flood Hazard Areas in accordance with
27	the National Flood Insurance Program"}.
28	(b) <i>Floodproofing certificate</i> .
29	(1) In general.
30	"Floodproofing certificate" means [a certification, in the form and containing the
31	information required by the Federal Emergency Management Agency, that a structure
32	has been designed and constructed to be dry floodproofed to the flood-protection
33	elevation] THE FEMA FORM 086-0-34 THAT IS TO BE COMPLETED, SIGNED AND
33 34	SEALED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED ARCHITECT TO CERTIFY
35	THAT THE DESIGN OF FLOODPROOFING AND PROPOSED METHODS OF CONSTRUCTION
35 36	ARE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTION 3-14 OF
37	THESE REGULATIONS.

THESE REGULATIONS.

1	(2) By whom prepared.
2 3	A floodproofing certificate may only be prepared and certified by a licensed professional engineer or professional architect.
4	(c) Flood Resilience Area.
5 6	"Flood Resilience Area" means the area described in § 2-2(g) {"Subdistricts: Flood Resilience Area"} of this article, AND IT:
7	(1) APPEARS ON THE FLOOD INSURANCE RATE MAP AS SHADED ZONE X; AND
8	(2) INCLUDES ALL AREAS SUBJECT TO THE 0.2% ANNUAL CHANCE FLOOD.
9	(d) <i>Floodway</i> .
10	(1) In general.
11 12 13 14 15	"Floodway" means the channel of a river or other watercourse and the adjacent land areas that [are] MUST BE reserved to pass [a] THE base-flood discharge so that the cumulative increase in the water surface elevation of the base-flood discharge is no more than a designated height. WHEN SHOWN ON A FIRM, THE FLOODWAY IS REFERRED TO AS THE "DESIGNATED FLOODWAY."
16	[(2) How shown on FIRM.]
17	[When shown on a FIRM, the Floodway is referred to as the "designated floodway".]
18	(2) [(3)] Considered high-velocity-flow area.
19 20	An area shown on a FIRM as a "designated floodway" is considered an area with "high velocity flow", as that term is used in ASCE 24, § 1.2 {"Definitions"}.
21	(e) Freeboard.
22 23	"Freeboard" [means a 2-foot increment of elevation added to the minimum elevation specifications of ASCE 24.] IS A FACTOR OF SAFETY EXPRESSED IN FEET ABOVE THE:
24	(1) HEIGHT OF THE 0.2% ANNUAL CHANCE OF FLOOD IN THE TIDAL FLOODPLAIN; OR
25	(2) BASE FLOOD ELEVATION IN THE NON-TIDAL FLOODPLAIN.
26	THE FREEBOARD IN BALTIMORE CITY IS 2 FEET.

1	(f) Functionally dependent use.
2	(1) In general.
3 4 5	"Functionally dependent use" means, except as otherwise provided in this subsection, any of the following uses that cannot perform their intended purposes unless located or carried out in close proximity to water:
6 7	 (i) docking facilities that are necessary for the loading and unloading of cargo or passengers; and
8	(ii) ship building and ship repair facilities.
9	(2) Exclusions.
10 11	"Functionally dependent use" does not include long-term storage or related manufacturing facilities.
12	(g) Historic structure.
13	"Historic structure" means a structure that is:
14 15 16	 individually listed in the National Register of Historic Places or certified or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing in the Register;
17	(2) individually listed in the Maryland Inventory of Historic Properties;
18	(3) individually listed in the Baltimore City Landmark List; or
19 20 21	(4) certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of an historic district registered with the Secretary.
22	(H) LIMIT OF MODERATE WAVE ACTION (LIMWA).
23 24 25 26	"LIMIT OF MODERATE WAVE ACTION (LIMWA)" MEANS THE INLAND LIMIT OF THE AREA AFFECTED BY WAVES GREATER THAN 1.5 FEET DURING THE BASE FLOOD. BASE FLOOD CONDITIONS BETWEEN THE VE ZONE AND THE LIMWA WILL BE SIMILAR TO, BUT LESS SEVERE THAN THOSE IN THE VE ZONE.
27	(I) LIMITED STORAGE.
28 29 30	"LIMITED STORAGE" MEANS STORAGE THAT IS INCIDENTAL TO THE PRIMARY USE OF THE PRINCIPAL STRUCTURE AND CONSISTS OF LOW-DAMAGE ITEMS THAT CANNOT BE CONVENIENTLY STORED ABOVE THE FLOOD PROTECTION ELEVATION.

1	(J) [(h)] Lowest floor.
2	(1) In general.
3 4	"Lowest floor" means, except as otherwise provided in this subsection:[, the lowest floor of the lowest enclosed area.]
5 6 7 8	(I) THE LOWEST FLOOR OF THE LOWEST ENCLOSED AREA (INCLUDING BASEMENT) OF A BUILDING OR STRUCTURE; THE FLOOR OF AN ENCLOSURE BELOW THE LOWEST FLOOR IS NOT THE LOWEST FLOOR PROVIDED THE ENCLOSURE IS CONSTRUCTED IN ACCORDANCE WITH THESE REGULATIONS; AND
9 10 11	(II) THE LOWEST FLOOR OF A MANUFACTURED HOME IS THE BOTTOM OF THE LOWEST HORIZONTAL SUPPORTING MEMBER (LONGITUDINAL CHASSIS FRAME BEAM).
12	(2) Exclusions.
13 14 15 16 17	"Lowest floor" does not include any unfinished or flood-resistant enclosure that is usable solely for parking vehicles, building access, or limited storage, as long as the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the Federal Emergency Management Agency, National Flood Insurance Program.
18	(K) [(i)] Manufactured home or building.
19	(1) In general.
20 21 22	"Manufactured home or building" means a structure, transportable in 1 or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities.
23	(2) Inclusions.
24 25 26	For floodplain management purposes, "manufactured home or building" includes any park trailer, travel trailer, and other similar vehicle placed on a site for more than 180 consecutive days.
27	(L) MIXED-USE STRUCTURE.
28 29	ANY STRUCTURE THAT IS USED OR INTENDED FOR USE FOR A MIXTURE OF NONRESIDENTIAL AND RESIDENTIAL USES IN THE SAME STRUCTURE.
30	(M) [(j)] New construction.
31 32 33 34 35	STRUCTURES INCLUDE ADDITIONS AND IMPROVEMENTS AND THE PLACEMENT OF MANUFACTURED HOMES, FOR WHICH THE START OF CONSTRUCTION COMMENCED ON OR AFTER MARCH 15, 1978, THE INITIAL EFFECTIVE DATE OF THE CITY OF BALTIMORE FLOOD INSURANCE RATE MAP, INCLUDING ANY SUBSEQUENT IMPROVEMENTS, ALTERATIONS, MODIFICATIONS, AND ADDITIONS TO SUCH STRUCTURES.

1	(1) Exclusions.
2 3 4	"New construction" does not include any structure for which the building permit was issued before March 15, 1978, and the actual start of construction was within 180 days of the permit date.
5	(2) "Actual start of construction".
6 7	As used in paragraph (1) of this subsection, "actual start of construction" means either:
8 9 10	 (i) the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or
11	(ii) the placement of a manufactured home on a foundation.
12	(3) "Permanent construction".
13 14	As used in paragraph (2) of this subsection, "permanent construction" does not include:
15	(i) land preparation, such as clearing, grading, and filling;
16	(ii) the installation of streets and walkways;
17	(iii) excavation for basements, footings, piers, or foundations;
18	(iv) the erection of temporary forms; or
19	(v) the installation on the property of accessory structures.
20	(N) [(k)] Nonconforming structure.
21 22	"Nonconforming structure" means any lawfully existing structure that does not comply with the applicable floodplain regulations of the subdistrict in which it is located.
23	(O) [(1)] Nonresidential structure.
24	"Nonresidential structure" includes the nonresidential portion of a mixed-use structure.
25	(P) [(m)] <i>Planning Department</i> .
26	"Planning Department" means the Baltimore City Department of Planning.
27	(Q) [(n)] <i>Planning Director</i> .
28 29	"Planning Director" means the Director of the Baltimore City Department of Planning or the Director's Designee.

1	(R) [(o)] Regulated Flood Hazard Area.
2	"Regulated Flood Hazard Area" means:
3	(1) any Flood Resilience Area; and
4	(2) any Special Flood Hazard Area.
5	(S) [(p)] Residential structure.
6	"Residential structure" includes the residential portion of a mixed-use structure.
7	(T) [(q)] Special Flood Hazard Area.
8	(1) In general.
9 10	"Special Flood Hazard Area" means the land in a floodplain subject to a 1% or greater chance of flooding in any given year.
11	(2) By whom and how designated.
12 13 14	Special Flood Hazard Areas are designated by the Federal Emergency Management Agency in the Flood Insurance Study and on the Flood Insurance Rate Map as Zones A, AE, AH, AO, A1-30 AND A99, AND ZONES [V] V1-30, and VE.
15	(U) [(r)] Structure.
16	(1) In general.
17 18	"Structure" means any building or other structure, SPECIFICALLY, A WALLED AND ROOFED BUILDING.
19	(2) Inclusions.
20 21	"Structure" includes a gas or liquid storage tank THAT IS PRINCIPALLY ABOVE GROUND, AS WELL AS A MANUFACTURED HOME.
22	(V) [(s)] Subdivision.
23	(1) In general.
24 25	"Subdivision" means the division or redivision by any means of a lot, tract, or parcel of land into 2 or more lots, tracts, parcels, or other divisions of land.
26	(2) Inclusions.
27 28	"Subdivision" includes a change in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, building, or lot development.

1	(W) [(t)] Substantial damage.
2	(1) IN GENERAL.
3 4 5	"Substantial damage" means damage of any origin sustained by a structure where the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.
6	(2) CALCULATION OF COSTS.
7 8	(I) THE CALCULATION OF THESE COSTS MUST COMPLY WITH FEMA P-758 {"SUBSTANTIAL IMPROVEMENT / SUBSTANTIAL DAMAGE DESK REFERENCE"}.
9 10	 (II) SEE ALSO § 1-2(X) {"DEFINITIONS: SUBSTANTIAL IMPROVEMENT"} OF THIS SUBTITLE.
11	(X) [(u)] Substantial improvement.
12	(1) In general.
13 14 15 16 17	 (i) "Substantial improvement" means, except as otherwise provided in this subsection, any combination of repairs, reconstruction, rehabilitation, additions, or other improvements to a structure made during the 6-year period immediately preceding a permit application, the aggregate cost of which, together with the cost of the work proposed by the latest permit application, equals or exceeds 50% of
18 19 20	the fair market value of the structure before the improvement is started.(ii) The calculation of these costs must comply with FEMA P-758 {"Substantial Improvement / Substantial Damage Desk Reference"}.
21 22 23 24	(iii) For purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the structure commences, whether or not that alteration affects the external dimensions of the structure.
25	(2) Inclusions.
26 27	"Substantial improvement" includes improvements to a structure that has been substantially damaged, regardless of the actual repair work done.
28	(3) Exclusions.
29	"Substantial improvement" does not include either:
30 31 32	 (i) an improvement that is required by a condemnation or violation notice, order, or citation to secure safe living conditions in compliance with State or City health, sanitary, or safety code specifications; or
33 34	(ii) an alteration of an historic structure[, as long as] IF the alteration will [not] preclude the structure's continued designation as an historic structure AS

1 2	APPROVED BY THE EXECUTIVE DIRECTOR OF THE HISTORIC AND ARCHITECTURAL PRESERVATION.
3	(Y) [(v) Water Management Administration] WATER & SCIENCE ADMINISTRATION.
4 5 6	["Water Management] "WATER & SCIENCE Administration" means the Water [Management] & SCIENCE Administration of the Maryland Department of the Environment.
7	(Z) $[(w)]$ Wetland.
8	"Wetland" means any land that is:
9 10	 (1) considered A "private wetland" or A "State wetland" under Title 9 {"Wetlandsand Riparian Rights"} of the State Natural Resources Article; or
11 12	(2) defined as A "wetland" by the U.S. Fish and Wildlife Service Identification and Classification Procedures.
13	(AA) [(x)] Wet floodproofing.
14	See "floodproofing".
15	§ 1-4. {Reserved}
16	§ 1-5. Rules of construction.
17	(a) In general.
18	In interpreting and applying this Division I, the following rules of construction apply.
19	(b) Captions or headings.
20	The captions or headings of the various sections and subsections:
21 22	(1) are for convenience of reference only, intended to summarize the statutory provisions that follow; and
23	(2) are not law and are not to be taken as affecting the meaning or effect of the law.
24	(c) Conflicting provisions.
25	(1) Division sets minimum requirements.
26 27 28	In their interpretation and application, the provisions of this Division I must be taken to be the minimum requirements for the promotion of the public health, safety, and general welfare.

1	(2) Most restrictive provision governs.
2 3 4 5	If any condition imposed by a provision of this Division I is either more or less restrictive than a comparable condition imposed by any other provision of this Division or by any other law, rule, or regulation of any kind, the condition that is the more restrictive governs.
6	(d) Gender.
7	Words denoting one gender include and apply to the other genders as well.
8	(e) Includes; including.
9	"Includes" or "including" means by way of illustration and not by way of limitation.
10	(f) Mandatory, prohibitory, and permissive terms.
11	(1) Mandatory terms.
12 13	"Must" and "shall" are each mandatory terms used to express a requirement or to impose a duty.
14	(2) Prohibitory terms.
15 16	"Must not", "may not", and "no may" are each mandatory negative terms used to establish a prohibition.
17	(3) Permissive terms.
18	"May" is permissive.
19	(g) Number.
20	The singular includes the plural and vice versa.
21	(h) References to other laws.
22 23 24	Whenever a provision of this Division I refers to any part of the City Code or to any othe law, the reference applies to any subsequent amendment of the law referred to, unless the referring provision expressly provides otherwise.
25	(i) Severability.
26 27 28 29 30	All provisions of this Division I are severable. If a court determines that a word, phrase, clause, sentence, paragraph, subsection, section, or other provision is invalid or that the application of any part of the provision to any person or circumstances is invalid, the remaining provisions and the application of those provisions to other persons or circumstances are not affected by that decision.

1	(j) Time computations.
2	(1) Computation of time after an act, event, or default.
3 4 5	 (i) In computing any period of time prescribed by this Division I, the day of the act, event, or default after which the designated period of time begins to run is not included.
6 7	 (ii) If the period of time allowed is more than 7 days, intermediate Saturdays, Sundays, and legal holidays are counted.
8 9	(iii) If the period of time allowed is 7 days or less, intermediate Saturdays, Sundays, and legal holidays are not counted.
10 11 12	(iv) The last day of the period so computed is included unless it is a Saturday, Sunday, or legal holiday, in which event the period runs until the end of the next day that is not a Saturday, Sunday, or legal holiday.
13	(2) Computation of time before a day, act, or event.
14 15 16 17	 (i) In determining the latest day for performing an act that is required by this Division I to be performed a prescribed number of days before a certain day, act, or event, all days preceding that day, including intervening Saturdays, Sundays, and legal holidays, are counted in the number of days so prescribed.
18 19 20	(ii) The latest day is included in the determination unless it is a Saturday, Sunday, or legal holiday, in which event the latest day is the first preceding day that is not a Saturday, Sunday, or legal holiday.
21	§ 1-6. Interpretation.
22	In their interpretation and application, the provisions of this Division I are to be:
23	(1) considered as minimum requirements;
24 25	(2) liberally construed in favor of proper flood hazard management and Baltimore City; and
26	(3) considered as neither repealing nor limiting any powers granted by State law.
27	§§ 1-7 to 1-8. { <i>Reserved</i> }

l § 1-9.	Findings,	intent,	and	design.
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(a) *Findings*.

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- (1) Certain areas of Baltimore City are subject to periodic inundation that results in loss of life and property, risks to health and safety, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief.
- 7 (2) Flood losses and associated losses are created by structures inappropriately located, 8 inadequately elevated, or otherwise unprotected and vulnerable to floods or erosion or 9 by development that increases flood or erosion damage to other lands or development.
- 10 (3) The biological values of floodplains, particularly tidal and non-tidal wetlands, can be 11 adversely affected by floodplain development.
- 12 (4) Baltimore City has the responsibility under the Flood Hazard Management Act of 1976, Title 5, Subtitle 8 of the State Environment Article, to control floodplain 13 development in order to protect persons and property from danger and destruction and 14 to preserve the biological values and environmental quality of the watersheds or the 15 portions of watersheds under its jurisdiction. 16
- 17 (5) Baltimore City has the responsibility under the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to adopt and enforce floodplain 18 management regulations that, AT A MINIMUM, meet the requirements of 44 Code of 19 Federal Regulations Parts 55-77 et seq., in order to participate in the National Flood 20 Insurance Program and remain eligible for federally subsidized flood insurance, federal disaster relief, and Federal and State financial assistance. 22
 - (6) Baltimore City contains densely developed tidal shorelines that are and will continue to be in high demand. The science behind climate change acknowledges that sealevel rise and coastal flooding will impact current and future development along the shoreline. Floodplain regulations are meant to protect people and property while making the City more resilient to the impacts from natural disasters and climate change.
- 29 (b) Intent.
 - It is, therefore, the intent of the Mayor and City Council by this Division I:
 - (1) to protect human life and health;
 - (2) to minimize public and private property damage;
 - (3) to encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future;
 - (4) to protect individuals from unwittingly buying lands and structures [which] THAT are unsuited for intended purposes because of the flood hazards;

1	(5) to protect water supply, sanitary sewage disposal, and natural drainage;
2 3 4	(6) to reduce financial burdens imposed on the community, its governmental units, and its residents by preventing the unwise design and construction of development in areas subject to flooding;
5	(7) to provide for public awareness of the flooding potential; and
6 7	(8) to provide for the biological and environmental quality of the watersheds or THE portions [thereof] OF WATERSHED located in Baltimore City.
8	(c) Design.
9 10 11	This Division I provides a unified comprehensive approach to floodplain management that addresses THE requirements of the following Federal and State programs concerned with floodplain management:
12 13	 the National Flood Insurance Program and the President's Executive Order 11988 of May 27, 1977, on floodplain management;
14	(2) the State Waterway Construction Permit Program;
15	(3) the State Wetlands Permit Program;
16 17	(4) the U.S. Army Corps of Engineers' Section 10 and Section 404 Permit Programs; and
18	(5) the State Coastal Zone Management Program.
19	(D) WARNING AND DISCLAIMER OF LIABILITY.
20	(1) WARNING.
21 22 23 24 25 26 27	THE DEGREE OF FLOOD PROTECTION REQUIRED BY THESE REGULATIONS IS CONSIDERED REASONABLE FOR REGULATORY PURPOSES AND IS BASED ON SCIENTIFIC AND ENGINEERING CONSIDERATIONS. LARGER FLOODS CAN AND WILL OCCUR, AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THESE REGULATIONS DO NOT IMPLY THAT LAND OUTSIDE OF THE SPECIAL FLOOD HAZARD AREAS OR USES THAT ARE PERMITTED WITHIN THOSE AREAS WILL BE FREE FROM FLOODING OR FLOOD DAMAGE.
28	(2) DISCLAIMER OF LIABILITY.
29 30 31 32 33	THESE REGULATIONS SHALL NOT CREATE LIABILITY ON THE PART OF THE CITY OF BALTIMORE, ANY OF ITS OFFICERS OR EMPLOYEES, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE), OR THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FOR ANY FLOOD DAMAGE THAT RESULTS FROM RELIANCE ON THESE REGULATIONS OR ANY ADMINISTRATIVE DECISION LAWFULLY MADE HEREUNDER.

1	§ 1-10. Short title.
2	This Division I may be cited as the "Baltimore City Floodplain Management Code".
3	Subtitle 2. Floodplain District
4	§ 2-1. Establishment of district.
5	(a) City to establish.
6 7	The City must establish a Floodplain District and an official floodplain map to include all areas subject to inundation by floodwaters.
8	(b) Bases.
9 10 11 12 13	(1) The basis of this delineation must be, at a minimum, the data contained in the most recent Flood Insurance Study for Baltimore City, and illustrated in the MOST RECENTLY ADOPTED Flood Insurance Rate Map. The Flood Insurance Rate Map illustrates both the Special Flood Hazard Areas and [that part of the tidal floodplain designated as] THE FLOOD RESILIENCE AREA ["areas of 0.2% annual chance flood"].
14 15	(2) The base-flood elevation, as determined in the Flood Insurance Study, is graphically delineated on the official floodplain map.
16 17 18 19	(3) Where field-surveyed topography or digital topography indicates that ground elevations are above the base-flood elevation in a Special Flood Hazard Area, then the area is considered in the Special Flood Hazard Area until FEMA issues a Letter of Map Change.
20 21 22 23	(4) Where field-surveyed topography or digital topography indicates that ground elevations are below the closest applicable [design-flood] FLOOD-PROTECTION elevation, even in areas not delineated on the FIRM as a Regulated Flood Hazard Area, the area is considered to be a Regulated Flood Hazard Area.
24	(c) District as overlay to zoning.
25 26	The Floodplain District is an overlay zoning district, as provided in the Zoning Code of Baltimore City.
27	§ 2-2. Subdistricts.
28	(a) In general.
29 30	(1) The Floodplain District comprises the [following] subdistricts SET FORTH IN THIS SECTION.

1 2	(2) IN ALL FLOODPLAIN DISTRICTS, THE FLOOD PROTECTION ELEVATION IS CALCULATED AS FOLLOWS:
3 4	(I) IN THE TIDAL FLOODPLAIN AREAS, IT IS THE HEIGHT AND GEOGRAPHIC EXTENT OF THE 0.2% ANNUAL CHANCE FLOOD IN THE TIDAL AREA PLUS FREEBOARD.
5 6 7	(II) IN THE NON-TIDAL FLOODPLAIN AREAS, IT IS THE EXTENT OF THE 0.2% ANNUAL CHANCE FLOOD, AND THE HEIGHT OF THE 1% ANNUAL CHANCE FLOOD PLUS FREEBOARD.
8	(b) <i>Floodway</i> .
9 10 11 12	The Floodway is that part of the Floodplain District that is reserved to [pass] CONVEY a base-flood discharge so that the cumulative increase in the water surface elevation of the base-flood discharge is no more than [a designated] THE height DESIGNATED BY FEMA IN THE FLOOD INSURANCE STUDY.
13	(c) Floodway Fringe.
14	(1) The Floodway Fringe comprises those lands within the Floodplain District that:
15 16	 (i) are subject to inundation by a base flood [or by a 0.2% annual chance flood]; and
17 18 19	(ii) lie beyond the Floodway (where a floodway has been determined), or in areas where detailed study data, profiles, and base-flood elevations have been established.
20 21	(2) The Floodway Fringe appears on the ["Flood Boundary and Floodway Maps" and "] Flood Insurance Rate Map as Zone AE.
22	(d) Approximated Floodplain.
23 24	(1) The Approximated Floodplain comprises those lands within the Floodplain District that:
25	(i) are subject to inundation by a base flood; and
26	(ii) lie in:
27 28	 (A) areas for which a detailed study has not been performed, but a base floodplain boundary has been approximated; or
29	(B) areas that are subject to shallow flooding.
30 31	(2) A base-flood elevation must be established after consideration of any flood elevation and floodway data available from Federal, State, or other sources.
32 33	(3) The Approximated Floodplain appears on the Flood Insurance Rate Map as Zones A and AO.

1	(e) Coastal Floodplain.
2 3	(1) The Coastal Floodplain, ALSO REFERRED TO AS TIDAL FLOODPLAIN, comprises those lands within the Floodplain District that:
4 5	 (i) due to high tides, hurricanes, tropical storms, and steady onshore winds, are subject to coastal or tidal inundation by a base flood; and
6	(ii) lie in areas where detailed study data are available.
7 8 9 10 11	(2) The Coastal Floodplain appears on the Flood Insurance Rate Map as Zones A and AE, AND INCLUDES AREAS ENCOMPASSED BY TRANSECTS DELINEATED BY FEMA IN THE FLOOD INSURANCE STUDY[.] (In Zone AE, a designation on the FIRM indicating "Limit of Moderate Wave Action" refers to the landward limit of waves of 1.5 feet or more in height.).
12	(f) Coastal High Hazard Area.
13 14 15 16 17 18 19 20	(1) The Coastal High Hazard Area [comprises those lands within the Floodplain District that are subject to inundation by coastal or tidal flooding, with high velocity waters and wave action] IS THE AREA WITHIN A SPECIAL FLOOD HAZARD AREA EXTENDING FROM OFFSHORE TO THE INLAND LIMIT OF A PRIMARY FRONTAL DUNE ALONG AN OPEN COAST AND ANY OTHER AREA THAT IS SUBJECT TO HIGH VELOCITY WAVE ACTION FROM STORMS OR SEISMIC SOURCES. THIS AREA IS DESIGNATED ON FIRMS AS VELOCITY ZONES V, VO, VE, OR V1-30, AND INCLUDES AREAS ENCOMPASSED BY TRANSECTS DELINEATED BY FEMA IN THE FLOOD INSURANCE STUDY.
21 22	(2) The Coastal High Hazard Area appears on the Flood Insurance Rate Map as Zones V and VE.
23	(g) Flood Resilience Area.
24	SEE § 1-3(C) {DEFINITIONS: FLOOD RESILIENCE AREA"} OF THIS DIVISION I.
25	[(1) The Flood Resilience Area comprises those lands within a tidal floodplain that:]
26 27	[(i) due to hurricanes, tropical storms, and the rising Bay are subject to a 0.2% chance of flooding in any given year; and]
28	[(ii) lie in areas where detailed study data are available.]
29	[(2) The Flood Resilience Area appears:]
30 31	[(i) on the Flood Insurance Rate Map, as that part of the tidal floodplain that is designated Zone X ("areas of 0.2% annual chance flood"); and]
32 33	[(ii) in the Flood Insurance Study's Table 4 {"Transect Data"}, under the column heading "0.2% annual chance".]

1 § 2-3. Official map.

2	(a) In general.
3 4	(1) The official floodplain map is the most current Flood Insurance Rate Map, as prepared by the Federal Emergency Management Agency.
5	(2) The official floodplain map:
6	(i) must be maintained by the Planning Department; and
7	(ii) is incorporated by reference as part of this Division I.
8	(b) Bases.
9 10	[(1)] The minimum bases for establishing Regulated Flood Hazard Areas and their respective [design-flood] FLOOD elevations are as follows:
11 12	 (1) [(i)] the most recent revision of the Flood Insurance Study for the City of Baltimore, dated [April 2, 2014;] JUNE 16, 2021.
13	(2) [(ii)] the accompanying Flood Insurance Rate Map; and
14	(3) [(iii)] all subsequent amendments and revisions to the FIRM.
15	[(c) Areas with ground levels below closest DFE.]
16 17 18 19	[Where field-surveyed topography or digital topography indicates that ground elevations are below the closest applicable design-flood elevation, even in areas not delineated on the FIRM as a Regulated Flood Hazard Area, the area is considered to be a Regulated Flood Hazard Area.]
20	§ 2-4. [Design-flood] FLOOD elevations.
21	(a) Nontidal floodplain.
22 23	 Regulated Flood Hazard Areas in the nontidal floodplain are designated on the FIRM as "Special Flood Hazard Areas".
24 25	(2) The [design-flood] FLOOD elevations for these areas correspond to the base-flood elevations specified in the Flood Insurance Study.
26	(b) <i>Tidal floodplain</i> .
27 28	(1) Regulated Flood Hazard Areas in the tidal floodplain are designated on the FIRM as Zones A, AE, V, VE, and X.
29 30 31	(2) The [design-flood] FLOOD elevations for Zones V and VE are as shown in the Flood Insurance Study's Table 4 {"Transect Data"}, under the column heading "Zone Designation and BFE".

1 2 3 4	(3) The [design-flood] FLOOD elevations for SHADED Zone X ("areas of 0.2% annual chance flood") and for Zones A and AE are those shown in the Flood Insurance Study's Table 4 {"Transect Data"}, under the column heading "0.2% Annual Chance".
5	(C) [(d)] FLOOD ELEVATIONS NOT [Not] provided by FIRM or FIS.
6 7 8	To establish [base-flood] FLOOD elevations for Regulated Flood Hazard Areas that do not have these elevations shown on the Flood Insurance Rate Map or in the Flood Insurance Study, the Floodplain Manager may:
9	(1) provide the best available data for [base-flood] FLOOD elevations;
10 11	(2) require the applicant to obtain available information from Federal, State, or other sources; or
12 13	(3) require the applicant to establish Regulated Flood Hazard Areas and design-flood elevations as set forth in § 2-5 {"Changes to District"} of this subtitle.
14	§ 2-5. Changes to District.
15	(a) When authorized.
16 17 18	The delineation of the Floodplain District and its Subdistricts may be revised, amended, or modified by the City, in compliance with the requirements of the National Flood Insurance Program and the Maryland Department of the Environment, if:
19 20	 there are changes through natural or other causes to flood elevations and boundaries; or
21 22	(2) changes are indicated by detailed hydrologic and hydraulic information and studies.
23	(b) Notice of changes.
24 25 26 27	As soon as practicable, but not later than 6 months after changes become known, the Planning Department must notify the Federal Insurance Administrator of the changes by submitting technical and scientific data in accordance with 44 Code of Federal Regulations, Part 65.
28	(c) Required Federal and State approvals.
29 30	All changes are subject to the review and approval of the Federal Emergency Management Agency and the Maryland Department of the Environment.

1	§ 2-6.	Unmapped	streams.
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- (a) Minimum flood protection setback.
- If development is proposed in the vicinity of an unmapped stream that has no delineated
 base floodplain, a minimum of A 25-foot flood protection setback from the stream's bank
 may be used.
- 6 (b) *State permits*.

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- State permits may be required. Applicants should request the State Water [Management] & SCIENCE Administration for a determination of whether its permit requirements apply.
- 9 (c) Variances.
- Variances may be applied for under Subtitle 5 {"Floodplain Variances"} of this
 Division I.
- 12 § 2-7. Floodplain Manager.
 - (a) Duties of Planning Department.
- 14 The Planning Department is responsible to ensure compliance with the National Flood 15 Insurance Program.
- 16 (b) Planning Director to appoint Manager.
- The Planning Director is responsible for appointing staff to carry out the duties of theFloodplain Manager.
- 19 (c) Duties of Floodplain Manager.

The Floodplain Manager is responsible for: 20 21 (1) overseeing and implementing the City's floodplain program; (2) responding to all requests and inquiries by the Administrator of the National 22 23 Flood Insurance Program; (3) reviewing applications to determine whether the proposed uses and other activities 24 will be reasonably safe from flooding; 25 (4) reviewing elevation certificates and requiring incomplete or deficient certificates 26 27 to be corrected; and (5) keeping all files required by the National Flood Insurance Program. 28

1	Subtitle 3. Development Regulations
2	Part 1. In General
3	§ 3-1. In general.
4	(a) New construction and substantial improvements.
5 6 7	(1) In order to prevent excessive damage to structures, all new construction and substantial improvements to existing structures in the Floodplain District must comply with:
8	(i) the regulations and restrictions of this subtitle; and
9 10	(ii) except as otherwise provided in this Division I, the design and construction standards of:
11	(A) ASCE 24 {"Flood Resistant Design and Construction"}; and
12 13	(B) ASCE 7 {"Minimum Design Loads for Buildings and Other Structures"}, Chapter 5 {"Flood Loads"}.
14 15	(2) Where [base-flood] FLOOD elevation data are used, the applicant must provide to the Planning Department:
16 17	 (i) floodproofing elevations for all new construction and all substantial improvements to an existing structure; and
18	(ii) corresponding elevation certificates.
19	(b) Projects overlapping subdistricts or elevations.
20 21 22	If a proposed structure or substantial improvement is sited in 2 different subdistricts or in a subdistrict with 2 different [design-flood] FLOOD elevations, the most restrictive regulation or higher flood elevation prevails.
23	(c) Classification of structures.
24 25 26	For the purpose of applying appropriate requirements, structures are classified according to ASCE 24, Table 1-1 {"Classification of Structures for flood Resistant Design and Construction"}.
27	Part 2. Districtwide Regulations
28	§ 3-2. In general.
29	In the entire Floodplain District, the following regulations and restrictions apply.

1	§ 3-3.	Conformance to programs, plans, and BFR Codes Article.
2	(a)	Permit programs.
3 4		The approval of any development must conform with the requirements of the permit programs of:
5		(1) the State Water [Management] & SCIENCE Administration; and
6		(2) all other applicable Federal, State, and City agencies.
7	(b)	Building, Fire, and Related Codes.
8 9		The approval of any development must conform with all applicable requirements of the Baltimore City Building, Fire, and Related Codes Article.
10	(c)	Management plans.
11 12		Where flood control and watershed management plans exist, all development must be consistent with those plans.
13	§ 3-4.	Residential structures.
14	(a)	Elevation.
15 16 17		(1) Every new or substantially improved residential structure, including A manufactured home, must have its lowest floor elevated to at least the flood-protection elevation[, as specified in ASCE 24].
18 19 20		(2) The elevation of the lowest floor AND THE LOWEST ELEVATION OF MACHINERY SERVING THE STRUCTURE [of the improvement] must be certified on an elevation certificate after the lowest floor AND MACHINERY ARE [is] in place.
21 22 23		(3) Every new or substantially improved residential structure must meet the requirements of § 3-14 {"Enclosures below lowest floor or flood-protection elevation"} of this subtitle.
24	(b)	Placement.
25 26		Every proposed structure must be placed on the lot so as to avoid location in the floodplain as much as possible.
27	(c)	Basements.
28 29		Basements are not permitted IN NEW STRUCTURES AND SUBSTANTIAL IMPROVEMENT OF EXISTING STRUCTURES (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE).

1	(d) Enclosures below flood-protection elevation.
2 3	[Enclosures below the flood-protection elevation must meet the requirements of § 3-14 {"Enclosures below lowest floor or flood-protection elevation"} of this subtitle.]
4	ENCLOSURES BELOW THE FLOOD-PROTECTION ELEVATION SHALL BE:
5 6	(1) USED SOLELY FOR PARKING OF VEHICLES, LIMITED STORAGE AND BUILDING ACCESS;
7	(2) CONSTRUCTED USING FLOOD DAMAGE-RESISTANT MATERIALS; AND
8 9	(3) PROVIDED WITH FLOOD OPENINGS THAT MEET THE CRITERIA LISTED UNDER § 1-3(A) {"DEFINITIONS: FLOODPROOFING"} OF THIS DIVISION I.
10	(e) Expansions in TIDAL AND nontidal floodplains.
11 12 13	[In nontidal floodplains, any] ANY horizontal expansion that increases the footprint and that is less than substantial must also have the lowest floor elevated to at least the flood-protection elevation.
14	§ 3-5. Nonresidential OR MIXED-USED structures.
15	(a) In general.
16	(1) Every new or substantially improved nonresidential structure must be either:
17 18	(i) elevated to at least the flood-protection elevation[, as specified in ASCE 24]; or
19	(ii) dry OR WET floodproofed.
20 21	(2) Basements [or the floodproofing option] are prohibited for any new nonresidential structure in THE TIDAL AND nontidal floodplains.
22 23 24	(3) Every new or substantially improved nonresidential structure must meet the requirements of § 3-14 {"Enclosures below lowest floor or flood-protection elevation"} of this subtitle.
25 26	(4) The elevation of the lowest floor of the improvement must be certified on an elevation certificate after the lowest floor is in place.
27 28	(5) IN MIXED-USE STRUCTURES, AREAS BELOW THE FLOOD-PROTECTION ELEVATION MAY NOT BE USED FOR RESIDENTIAL USE EVEN IF THE AREA IS FLOODPROOFED.
29	(b) <i>Floodproofing option</i> .
30 31 32	(1) Floodproofing designs for existing structures must [insure] ENSURE that areas below the flood- protection elevation are watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic

1 2	and hydrodynamic loads and effects of buoyancy, AS DESCRIBED IN § 1-3(A) {"DEFINITIONS: FLOODPROOFING"} OF THIS DIVISION I.
3 4 5 6 7	(2) If the floodproofing option is chosen, a floodproofing certificate must be completed by a licensed professional engineer or professional architect who has reviewed the design and specifications and certifies that the nonresidential structure will meet this standard. A USE AND OCCUPANCY PERMIT CANNOT BE APPROVED UNTIL THE FLOODPROOFING CERTIFICATE IS SUBMITTED.
8	(c) Expansions in TIDAL AND nontidal floodplains.
9 10 11	In TIDAL AND nontidal floodplains, any horizontal expansion that increases the footprint and that is less than substantial must also have the lowest floor elevated to at least the flood-protection elevation.
12	§ 3-6. Less than substantial improvement.
13	(a) In general.
14 15	If the construction, reconstruction, or modification of any structure constitutes less than a substantial improvement:
16 17 18	 (1) the [replacement] INSTALLATION of any electric, plumbing, or mechanical systems must comply with § 3-10 {"Electric, plumbing, and mechanical systems"} of this subtitle[;], and
19	(2) those parts of the improvement below] the flood-protection elevation must:
20	(i) be floodproofed; and
21	(ii) otherwise comply with the design and construction standards of ASCE 24.
22	(b) Exceptions.
23 24 25	(1) Routine maintenance, [and] repairs, AND THE IN-KIND REPLACEMENT OF MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS are [excepted] EXEMPT from the requirements of this section.
26 27	(2) FOR IN-KIND REPLACEMENT, THE SYSTEMS MUST BE ELEVATED TO THE MAXIMUM EXTENT POSSIBLE TO AVOID OR MINIMIZE FLOOD DAMAGE.
28	§ 3-7. Impacts on habitat.
29	All development must be undertaken in a manner that minimizes adverse impacts on aquatic

30 and terrestrial habitat and their related flora and fauna.

1	§ 3-8. Design, anchoring, and materials.
2	(a) In general.
3	All construction and improvements must be:
4 5 6 7	 (1) designed, constructed, connected, and anchored to prevent flotation, collapse, or lateral movement of the structure, in accordance with the standards for new construction and substantial improvements specified in ASCE 24, § 1.5.1 {"General"};
8 9	(2) constructed and placed on the lot so as to offer the minimum obstruction to the flow and height of floodwaters;
10	(3) constructed with material and utility equipment resistant to flood damage; and
11	(4) constructed by methods and practices that minimize flood damage.
12	(b) Materials below THE FLOOD PROTECTION ELEVATION [FPE.]
13 14	Unless the structure is dry floodproofed to the flood-protection elevation, materials used below that elevation must be resistant to floodwater damage, as specified in:
15 16 17	(1) FEMA Technical Bulletin 2, "Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program"; [or] AND
18	(2) ASCE 24, § 5.0 {"Materials"}.
19	(c) Tanks.
20	Tanks must be designed and installed as specified in ASCE 24, § 7.4.1 {"Tanks"}.
21	(D) <i>ELEVATORS</i> .
22 23	FOR INSTALLATION IN ANY STRUCTURE LOCATED IN ANY FLOODPLAIN SUBDISTRICT, ELEVATORS MUST BE DESIGNED AND INSTALLED:
24	(1) AS SPECIFIED IN ASCE 24, § 7.5 {"ELEVATORS"}; AND
25 26	(2) AS SPECIFIED IN FEMA TECHNICAL BULLETIN 4: TECHNICAL BULLETIN 4, ELEVATORS IN BUILDINGS LOCATED IN SPECIAL FLOOD HAZARD AREAS.

1	§ 3-9. Landscape design.
2	(a) Ground cover.
3 4	Adequate ground cover must be provided for soil stabilization within the Floodplain District.
5	(b) Land contours and plant material.
6 7	Land contours must be designed and plant material chosen[, so as] to direct surface runoff away from structures and not increase surface runoff onto neighboring properties.
8	§ 3-10. Electric, plumbing, and mechanical systems.
9	(a) In general.
10 11 12 13 14	Except as otherwise provided in subsection (b) of this section, electric, plumbing, and mechanical systems and their attendant components and equipment, including heaters, furnaces, generators, heat pumps, air conditioners, distribution panels, toilets, showers, sinks, duct work, and other permanent electrical, plumbing, or mechanical installations, are only permitted at or above the flood-protection elevation.
15	(b) Exceptions.
16 17 18 19 20	(1) Subsection (a) of this section does not apply to a system that is designed and installed, in accordance with ASCE 24, to prevent water from entering or accumulating within its components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the flood- protection elevation.
21 22 23	(2) In addition, electrical wiring systems for 1- and 2-family dwellings must conform to the requirements of the Baltimore City Residential Code for One- and Two-Family Dwellings, Part VIII {"Electrical"}, for wet locations.
24 25 26	(3) SUBSECTION (A) OF THIS SECTION DOES NOT APPLY TO ROUTINE MAINTENANCE, REPAIRS, AND THE IN-KIND REPLACEMENT OF MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS IN LESS-THAN SUBSTANTIAL IMPROVEMENT PROJECTS.
27	§ 3-11. Storage.
28 29	Materials AND PRODUCTS that are buoyant, flammable, OR explosive, or that in times of flooding could be injurious to human, animal, or plant life may not be stored [below 2 feet

above the design-flood elevation] THE FLOOD PROTECTION ELEVATION. 30

1	§ 3-12. Fill.
2	(a) In general.
3	(1) In the Coastal High Hazard Area:
4	(i) fill is prohibited for structural support; but
5 6	(ii) placement of nonstructural fill is allowed to the extent provided in this section and in ASCE 24, § 4.5.4 {"Use of Fill"}.
7	(2) In the Coastal Floodplain:
8	(i) fill material must meet the requirements of this section; and
9	(ii) structural fill must comply with all applicable provisions of ASCE 24.
10	(b) Maximum fill amount.
11 12	The placement of more than 600 cubic yards of NET fill per acre in the floodplain is prohibited except by variance.
13	(c) Required alternate consideration.
14 15	(1) Elevating a structure by other methods must be considered unless 600 cubic yards or less of fill are required.
16	(2) An applicant must demonstrate that:
17 18	 (i) fill is the only alternative to raising the structure to at least the flood- protection elevation; and
19 20	(ii) the amount of fill used will not affect the flood storage capacity or increase flooding onto neighboring properties.
21	(d) Affect on adjacent properties.
22 23	Fill may be used only to the extent to which it does not adversely affect adjacent properties.
24	(e) Materials.
25	(1) Fill may consist of soil or rock materials only.
26	(2) Landfills, dumps, and sanitary soil fills are not permitted.

(f) Compacting standards.

Fill material must be compacted in accordance with the standard proctor test method issued by the American Society for Testing and Materials (ASTM Standard D-698) to provide the necessary stability and resistance to erosion, scouring, or settling.

5 (g) Slopes.

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Fill slopes may be no steeper than 1 vertical to 2 horizontal, unless substantiating data justifying steeper slopes are submitted to and approved by the Department of Public Works.

(h) Hydrologic and hydraulic analyses.

If structures on adjacent properties are known or determined to be subject to flooding under current conditions, the Floodplain Manager may require submission of hydrologic and hydraulic analyses to adequately demonstrate the effects of the proposed fill. A HYDROLOGIC AND HYDRAULIC ANALYSIS REQUIREMENT DOES NOT APPLY TO PROJECTS LOCATED IN THE COASTAL FLOODPLAIN OR TIDAL PORTION OF THE FLOOD RESILIENCE AREA.

- 16 § 3-13. Accessory structures.
 - (a) In general.

18 [Due to their minimal investment, accessory structures are exempt from the elevation or 19 dry floodproofing standards of this Division I as long as all of the requirements of this 20 section are met.]

- ACCESSORY STRUCTURES SHALL BE LIMITED TO NO MORE THAN 300 SQUARE FEET IN
 TOTAL FLOOR AREA.
- 23 (B) *REQUIREMENTS*.
- 24 ACCESSORY STRUCTURES:
- (1) SHALL COMPLY WITH THE ELEVATION REQUIREMENTS AND OTHER REQUIREMENTS
 OF § 3-14 {"ENCLOSURES BELOW THE FIRST FLOOR OR FLOOD PROTECTION
 ELEVATION"} OF THIS SUBTITLE; OR
- 28 (2) SHALL:
- 29 (I) BE USEABLE ONLY FOR PARKING OF VEHICLES OR LIMITED STORAGE;
- 30(II) BE CONSTRUCTED WITH FLOOD DAMAGE-RESISTANT MATERIALS BELOW THE31FLOOD PROTECTION ELEVATION;
- 32 (III) BE CONSTRUCTED AND PLACED TO OFFER THE MINIMUM RESISTANCE TO THE
 33 FLOW OF FLOODWATERS;

1	(IV) BE ANCHORED TO PREVENT FLOTATION;
2 3	(V) HAVE ELECTRICAL SERVICE AND MECHANICAL EQUIPMENT ELEVATED TO OR ABOVE THE FLOOD PROTECTION ELEVATION; AND
4 5	(VI) HAVE FLOOD OPENINGS THAT MEET THE CRITERIA DESCRIBED IN § 1-3(A) {"DEFINITIONS: FLOODPROOFING"} OF THIS DIVISION I.
6	[(b) <i>Plans statement</i> .]
7	[A statement must be placed on the building plans, to read as follows:
8 9 10 11	"This structure may not be converted to any use other than for parking vehicles or limited storage, nor may it be enlarged beyond 300 square feet or 1 story, unless the structure is brought into compliance with City Code Article 7 {"Natural Resources"}, Division I {"Floodplain Management"}.]
12	[(c) <i>Elevation</i> .]
13	[The floor elevation of the accessory structure:
14	(1) does not qualify as a basement; and
15 16	 (2) must be constructed on or above grade and meet the requirements of § 3-14 {'Enclosures below lowest floor or flood-protection elevation"} of this subtitle.]
17	[(d) Minimum resistance.]
18	[The accessory structure must:
19 20	(1) be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters; and
21 22	(2) meet the requirements of § 3-14 {'Enclosures below lowest floor or flood-protection elevation"} of this subtitle.]
23	[(e) <i>Firm anchorage</i> .]
24 25	[The accessory structure must be firmly anchored to prevent flotation that might result in damage to other structures.]
26	[(f) Flood damage potential.]
27 28	[The accessory structure must be designed to have low flood damage potential, including provisions to allow free flow of water into and out of it to maintain equal pressure.]
29	[(g) Service facilities.]
30 31	[The service facilities, such as electrical, plumbing, and heating equipment, must be elevated to the applicable flood-protection elevation or be floodproofed.]

1	[(h) Non-conversion agreement.]
2	[(1) A non-conversion agreement must be completed and signed by the property owner.
3 4 5	 (2) The design and construction of the structure must follow the regulations stated in the agreement and be equipped with water equalizing vents as specified in §§ 3-4 {"Residential structures"} and 3-5 {"Nonresidential structures"}.]
6	§ 3-14. Enclosures below lowest floor or flood-protection elevation.
7	(A) IN GENERAL.
8 9	New construction and substantial improvements of fully enclosed areas below the lowest floor or below the flood-protection elevation:
10 11 12 13 14	 (1) are limited to FLOODPROOFED areas usable solely for parking vehicles, limited storage, AND building access[, and crawl spaces] AS SPECIFIED IN §§ 1-3(A) {"DEFINITIONS: FLOODPROOFING"}, § 3-4 {"RESIDENTIAL STRUCTURES"}, AND 3-5 {"NON-RESIDENTIAL AND MIXED-USED STRUCTURES"} OF THIS DIVISION I; [and] OR
15 16 17 18	 (2) must be designed to meet or exceed the minimum criteria [ASCE 24, § 2.6 {"Enclosures Below the Design Flood Elevation"}] DESCRIBED IN § 1-3(A) {"DEFINITIONS: FLOODPROOFING"} OF THIS DIVISION I FOR DRY FLOODPROOFING AND WET FLOODPROOFING.
19	(B) STATE REGULATIONS.
20 21	THE STATE MAY HAVE DIFFERENT, MORE STRINGENT REQUIREMENTS SET FORTH IN COMAR 26.17.03 {"CONSTRUCTION ON NONTIDAL WATERS AND FLOODPLAINS"}.
22	§ 3-15. Watercourses.
23	(A) IN GENERAL.
24 25 26 27 28 29 30 31	(1) FOR ANY PROPOSED DEVELOPMENT THAT INVOLVES ALTERATION OF A WATERCOURSE, UNLESS WAIVED BY MDE, THE APPLICANT SHALL DEVELOP HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES AND TECHNICAL DATA REFLECTING SUCH CHANGES, AND SUBMIT SUCH TECHNICAL DATA TO THE FLOODPLAIN ADMINISTRATOR AND TO FEMA. THE ANALYSES SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN A FORMAT REQUIRED BY MDE AND BY FEMA FOR A CONDITIONAL LETTER OF MAP REVISION AND A LETTER OF MAP REVISION UPON COMPLETION OF THE PROJECT.
32 33	(2) SUBMITTAL REQUIREMENTS AND FEES SHALL BE THE RESPONSIBILITY OF THE APPLICANT.

(B) SUBMISSION REQUIREMENTS.

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2 3	ALTERATION OF A WATERCOURSE MAY BE PERMITTED ONLY UPON SUBMISSION, BY THE APPLICANT, OF THE FOLLOWING:
4 5	(1) A DESCRIPTION OF THE EXTENT TO WHICH THE WATERCOURSE WILL BE ALTERED OR RELOCATED;
6 7	(2) A CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER THAT THE FLOOD-CARRYING CAPACITY OF THE WATERCOURSE WILL NOT BE DIMINISHED;
8 9 10	(3) EVIDENCE THAT ADJACENT COMMUNITIES, THE U.S. ARMY CORPS OF ENGINEERS, AND MDE HAVE BEEN NOTIFIED OF THE PROPOSAL, AND EVIDENCE THAT THE NOTIFICATIONS HAVE BEEN SUBMITTED TO FEMA; AND
11 12 13 14	(4) EVIDENCE THAT THE APPLICANT SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY MAINTENANCE FOR THE ALTERED OR RELOCATED PORTION OF THE WATERCOURSE SO THAT THE FLOOD CARRYING CAPACITY WILL NOT BE DIMINISHED.
15	(C) AGREEMENT WITH CITY.
16 17 18	(1) THE FLOODPLAIN ADMINISTRATOR MAY REQUIRE THE APPLICANT TO ENTER INTO AN AGREEMENT WITH THE MAYOR AND CITY COUNCIL SPECIFYING THE MAINTENANCE RESPONSIBILITIES.
19 20 21	(2) IF AN AGREEMENT IS REQUIRED, THE PERMIT SHALL BE CONDITIONED TO REQUIRE THAT THE AGREEMENT BE RECORDED ON THE DEED OF THE PROPERTY WHICH SHALL BE BINDING ON FUTURE OWNERS.
22	[(a) Variance required to alter.]
23 24 25 26	In all floodplain zones or areas within 25 feet from a water course, any development that proposes to alter a watercourse must obtain a variance under Subtitle 5 {"Floodplain Variances"} of this Division I.
20 27	[(b) Conditions for encroachment to be minimized.]
28	[All conditions for encroachment in the Floodway must be minimized.]
29	[(c) Required notices.]
30 31	[Adjacent communities and property owners, FEMA, and the State Water Management Administration must be notified of any application.]

1	§ 3-16. Flood protection setback.
2	(a) Watercourse with floodplain.
3 4 5	(1) A minimum 25-foot flood protection setback must be maintained from the edge of the banks of any watercourse delineated on the floodplain map or FIRM as having a floodplain.
6	(2) To prevent erosion, natural vegetation must be maintained in this area.
7 8 9	(3) Where natural vegetation does not exist along the water course and conditions for replanting are suitable, high priority must be given to planting trees in the setback area to stabilize banks and to enhance aquatic resources.
10	(b) Stream with no floodplain.
11 12	(1) A minimum 25-foot flood-protection setback must be maintained from the top of the bank of any stream that has no designated floodplain.
13	(2) Natural vegetation must be maintained and, if needed, trees planted.
14	§ 3-17. Utilities and facilities.
15	(a) In general.
16 17	In the entire Floodplain District, the design, placement, and construction of all public and private utilities and facilities must meet:
18	(1) the requirements of this section; and
19	(2) all applicable requirements of ASCE 24.
20	(b) <i>Design and floodproofing</i> .
21 22	(1) New or replacement water supply systems, on-site disposal systems, or sanitary sewage systems must be designed and floodproofed:
23 24	 (I) to eliminate or minimize infiltration of floodwaters into the systems and discharges from the systems into floodwaters; and
25	(II) to avoid impairment during flooding and minimize flood damage.
26 27	(2) All gas, electrical, and other facility and utility systems must be located, constructed, and floodproofed to eliminate or minimize flood damage.
28	(c) Sewage systems.
29	(1) All pipes connected to sewage systems must be sealed to prevent leakage.
30	(2) Cesspools and seepage pits are prohibited.

1 2	(3) Septic tanks are permitted if they are securely anchored to resist buoyant forces during inundation.
3	(d) New storm drainage facilities.
4 5	All new storm drainage facilities within or leading to or from the Floodplain District must be adequately designed, floodproofed, and installed to:
6 7	(I) eliminate or minimize property damage resulting from the floodwaters of a base flood; and
8	(ii) minimize adverse environmental impacts of their installation and use.
9	§ 3-18. Nontidal AE Zones without designated floodways.
10 11 12	New development is not permitted within a nontidal AE Zone that is without a designated floodway, unless it is demonstrated that the cumulative effect of all past and projected development will not increase the base-flood elevation by more than 1 foot.
13	§ 3-19. Recreational vehicles.
14	(a) <i>"Recreational vehicle" defined.</i>
15	In this section, "recreational vehicle" means a vehicle that is:
16	(1) built on a single chassis;
17	(2) 400 square feet or less when measured at the largest horizontal projection;
18 19	(3) designed to be self-propelled or to be permanently towable by a light duty truck; and
20 21	(4) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.
22	(b) Treatment of recreational vehicles.
23	All recreational vehicles in the Floodplain District must be:
24	(1) elevated and anchored as required by applicable State and Federal laws; or
25	(2) fully licensed and highway ready.
26	§ 3-20. Temporary structures or storage.
27	(a) <i>"Temporary structure" defined.</i>
28 29	In this section, "temporary structure" a structure erected, installed, and used for a period [of less than] NOT TO EXCEED 180 days.

(b) Application for permit.

In addition to the requirements of § 4-2 {"Development Permits: Applications"} OF THIS DIVISION I, an application for the placement or erection of a temporary structure or for the temporary storage of any goods, materials, or equipment must specify the duration of the temporary use.

6 (c) *Structures*.

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The temporary s	structure:
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- must be designed and constructed to prevent flotation, collapse, or lateral movement resulting from hydrodynamic loads and hydrostatic loads during conditions of a base flood;
- (2) must have electric service installed in compliance with the Baltimore City electric code;
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- 14 (3) must comply with all other requirements of the applicable State and City permit authorities; and
 - (4) if in a Floodway, all necessary Federal and State permits must be obtained.
- 17 (d) Storage.
- 18 [Temporary storage:] STORAGE IN A TEMPORARY STRUCTURE
- 19 [(1)] may not include any hazardous materials[; and
- 20 (2) if in a Floodway, all necessary Federal and State permits must be obtained].
- 21 § 3-21. LETTER OF MAP CHANGE.
- 22 (A) SCOPE OF SECTION.
- 23 THIS SECTION APPLIES TO ANY PROPERTY OWNER REQUESTING MAPPING CHANGES.
- 24 (B) LETTER OF MAP CHANGE.

A LETTER OF MAP CHANGE IS AN OFFICIAL FEMA DETERMINATION, BY LETTER, THAT AMENDS OR REVISES AN EFFECTIVE FLOOD INSURANCE RATE MAP OR FLOOD INSURANCE STUDY.

28 (C) LETTER OF MAP AMENDMENT (LOMA).

A LETTER OF MAP AMENDMENT IS AN AMENDMENT BASED ON TECHNICAL DATA SHOWING
 THAT A PROPERTY WAS INCORRECTLY INCLUDED IN A DESIGNATED SPECIAL FLOOD
 HAZARD AREA. A LOMA AMENDS THE CURRENT EFFECTIVE FLOOD INSURANCE RATE
 MAP AND ESTABLISHES THAT A SPECIFIC PROPERTY OR STRUCTURE IS NOT LOCATED IN A
 SPECIAL FLOOD HAZARD AREA.

(D) LETTER OF MAP REVISION (LOMR).

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A LETTER OF MAP REVISION IS A REVISION BASED ON TECHNICAL DATA THAT MAY SHOW CHANGES TO FLOOD ZONES, FLOOD ELEVATIONS, FLOODPLAIN AND FLOODWAY DELINEATIONS, AND PLANIMETRIC FEATURES. A LETTER OF MAP REVISION BASED ON FILL (LOMR-F), IS A DETERMINATION THAT A STRUCTURE OR PARCEL OF LAND HAS BEEN ELEVATED BY FILL ABOVE THE BASE FLOOD ELEVATION AND IS, THEREFORE, NO LONGER EXPOSED TO FLOODING ASSOCIATED WITH THE BASE FLOOD. IN ORDER TO QUALIFY FOR THIS DETERMINATION, THE FILL MUST HAVE BEEN PERMITTED AND PLACED IN ACCORDANCE WITH THE COMMUNITY'S FLOODPLAIN MANAGEMENT REGULATIONS.

10 (E) CONDITIONAL LETTER OF MAP REVISION (CLOMR).

11 A CONDITIONAL LETTER OF MAP REVISION IS A FORMAL REVIEW AND COMMENT AS TO 12 WHETHER A PROPOSED FLOOD PROTECTION PROJECT OR OTHER PROJECT COMPLY WITH THE 13 MINIMUM NFIP REQUIREMENTS FOR SUCH PROJECTS WITH RESPECT TO DELINEATION OF 14 SPECIAL FLOOD HAZARD AREAS. A CONDITIONAL LETTER OF MAP REVISION BASED ON 15 FILL (CLOMR-F) IS A DETERMINATION THAT A PARCEL OF LAND OR PROPOSED 16 STRUCTURE THAT WILL BE ELEVATED BY FILL WOULD NOT BE INUNDATED BY THE BASE 17 FLOOD IF FILL IS PLACED ON THE PARCEL AS PROPOSED OR THE STRUCTURE IS BUILT AS 18 PROPOSED. A CLOMR DOES NOT REVISE THE EFFECTIVE FLOOD INSURANCE RATE MAP OR FLOOD INSURANCE STUDY; ON SUBMISSION AND APPROVAL OF CERTIFIED AS-BUILT 19 20 DOCUMENTATION, A LETTER OF MAP REVISION MAY BE ISSUED BY FEMA, TO REVISE THE 21 EFFECTIVE FIRM.

22 (F) ISSUANCE OF PERMITS.

IF A PROPOSED DEVELOPMENT IS CONTINGENT UPON A MAP CHANGE, NO PERMITS WILL BE
ISSUED FOR THE DEVELOPMENT UNTIL THE LETTER OF MAP REVISION (LOMR) HAS BEEN
ISSUED BY FEMA. THE PROPOSED DEVELOPMENT MUST BE COMPLIANT WITH ALL
PERTINENT REQUIREMENTS OF DIVISION I OF ARTICLE 7.

- 27 [§§ 3-21 to 3-22. {Reserved}]
- 28 § 3-22. {Reserved}

1	Part 3. Floodway Regulations
2	§ 3-23. In general.
3	In the Floodway, the following regulations and restrictions apply.
4	§ 3-24. New private principal structures prohibited.
5 6	New construction of private principal structures, whether residential, commercial, or industrial, is prohibited.
7	§ 3-25. All development requires offset.
8	[No development is permitted unless:]
9 10	PUBLIC INFRASTRUCTURE AND ENVIRONMENTAL PROJECTS TAKING PLACE ON PUBLIC LAND THAT AIM TO IMPROVE DRAINAGE AND WATER QUALITY ARE PERMITTED IN THE FLOODWAY IF:
11 12	 the development complies with all otherwise applicable requirements of this Division I;
13 14	(2) the effect of that development on flood heights is fully offset by accompanying stream modification; and
15 16	(3) the development is approved by all appropriate local authorities, the State Water [Management] & SCIENCE Administration, and the U.S. Army Corps of Engineers.
17	§ 3-26. Engineering report.
18	(a) <i>Report required</i> .
19 20 21 22	Any proposal to offset the effect of development in the Floodway by construction of stream modifications must be documented by an engineering report, prepared by a licensed professional engineer, that fully evaluates the effects of the construction and is submitted with the application for a building permit.
23	(b) Basis.
24 25	As the basis of analysis, the report must use the base flood and floodway data prepared by the Federal Emergency Management Agency.
26	§ 3-27. Map revision.
27 28 29 30	ANY DEVELOPMENT IN THE FLOODWAY THAT PROPOSES TO INCREASE THE WATER SURFACE ELEVATION OR CHANGE THE DELINEATION OF THE FLOODWAY REQUIRES A CONDITIONAL LETTER OF MAP REVISION AND A LETTER OF MAP REVISION AS DESCRIBED IN § 3-21 {"LETTER OF MAP CHANGE"} OF THIS SUBTITLE.
31	[(a) Scope of section.]

1 2	[This section applies to any development in the Floodway that might result in an increase in water surface elevations or a change to the Floodway.]
3	[(b) Conditional Letter of Map Revision.]
4 5	[(1) Before a permit may be issued for a proposed development that is subject to this section, the applicant must obtain from FEMA a Conditional Letter of Map Revision.]
6 7 8 9	[(2) To obtain this Conditional Letter, the applicant must submit hydrologic and hydraulic analyses that are based on existing floodway models, performed in accordance with standard engineering practices, and certified by a licensed professional engineer.]
10	[(c) Letter of Map Revision.]
11 12	[Before an occupancy permit may be issued for the development, the developer must obtain from FEMA a Letter of Map Revision.]
13	§ 3-27. { <i>Reserved</i> }
14	§ 3-28. Alternative analysis.
15	(a) Required for permit.
16 17 18	Before a permit may be issued for any [proposed] ALLOWED development in the Floodway, the applicant must prepare and submit to the Planning Department an alternative analysis in accordance with this section.
19	(b) Scope of analysis.
20	The alternative analysis must demonstrate that:
21	(1) no reasonable alternative exists outside OF the Floodway;
22	(2) the encroachment in the Floodway is the minimum necessary;
23	(3) the development will withstand a base flood without significant damage; and
24	(4) on the basis of hydrologic and hydroulic analyzes, prepared by a licensed
24 25	(4) on the basis of hydrologic and hydraulic analyses, prepared by a licensed professional engineer in accordance with the requirements of the Federal
26 27	Emergency Management Agency and the Maryland Department of the Environment, the development:
28	(i) will not result in any increase in the base-flood elevation; and
29	(ii) will neither increase downstream or upstream flooding or erosion nor
30	significantly contribute to debris.

1	§ 3-29. Changes to existing structures.
2	(a) Substantial improvements.
3	(1) An existing structure in the Floodway may be substantially improved only:
4	(i) by variance;
5 6	(ii) if the structure can be brought into conformance with this Division I without increasing its existing footprint; and
7 8	(iii) if all residential uses of the structure are provided egress outside of the base flood.
9 10	(2) Substantial improvement of a nonconforming structure, regardless of location, may only be undertaken in compliance with this Division I and any other applicable law.
11	(b) Substantial damage or proposed replacement.
12 13 14	(1) In the event of substantial damage or proposed replacement, the applicant must submit an alternative analysis to determine if the structure can be relocated to a less hazardous site.
15 16	(2) Where replacement structures cannot be relocated, they must be limited to the footprint of the previous structure.
17	(3) Any replacement structure must meet all applicable requirements of this Division I.
18	(c) <i>Elevation or floodproofing</i> .
19 20 21	The modification, alteration, repair, reconstruction or improvement of any non- conforming structure and/or development amounting to less than 50% of its fair market value shall be elevated and/or floodproofed to the greatest extent possible.
22	(d) <i>Nuisance to be eliminated.</i>
23	Uses or their adjuncts that are or become nuisances may not be permitted to continue.
24	§ 3-30. Prohibited structures.
25	(a) Manufactured homes or buildings.
26	The placement of any manufactured homes or buildings is prohibited.
27	(b) Fences, enclosures, etc.
28	The following may not be placed or caused to be placed in the Floodway:
29	(1) fences, except 2-rail or single-cable fences; and

1	(2) any enclosures or materials (including fill) that:
2	(i) might impede, retard, or change the direction of the flow of water;
3	(ii) will catch or collect debris carried by water; or
4 5 6	(iii) is placed where the natural flow of stream or floodwaters would carry enclosures or materials downstream to the damage or detriment of public or private property in or adjacent to the floodplain.
7	§§ 3-31 TO 3-32. { <i>Reserved</i> }
8	Part 4. Other Subdistrict Regulations
9	§ 3-33. Approximated Floodplain.
10	(a) In general.
11 12	In the Approximated Floodplain (ZONES A AND AO), the following additional regulations apply.
13	(b) Use of available data.
14 15 16 17 18	In the enforcement of this Division I, the Planning Department must obtain, review, and reasonably use any base-flood elevation and floodway data available from Federal, State, or other sources, such as the U.S. Army Corps of Engineers, the Soil Conservation Service, the State Water [Management] & SCIENCE Administration, or any regional planning organization.
19	(c) When data unavailable.
20 21 22	When the base-flood elevation is not known, the Planning Department, in consultation with the State Water [Management] & SCIENCE Administration, must evaluate each site and establish an approximate base-flood elevation.
23	§ 3-34. Coastal Floodplain and Flood Resilience Area.
24 25	In the Coastal Floodplain and the Flood Resilience Area, the regulations specified in ASCE 24, § 4.0 {"Coastal High Hazard Areas and Coastal A Zones"} apply.
26	§ 3-35. Coastal High Hazard Area.
27	(a) In general.
28	In the Coastal High Hazard Area (ZONES V AND VE):
29	(1) the [following regulations of this section apply; and
30 31	(2) except as otherwise provided in this Division I, the regulations specified in ASCE 24, § 4.0 {"Coastal High Hazard Areas and Coastal a Zones"} also apply.

1	(b) Land below base flood level.
2 3	No land below the level of the base flood may be developed unless the new construction or substantial improvement:
4	(1) is located landward of the reach of mean high tide;
5 6 7 8 9	(2) is elevated on adequately anchored pilings or columns to resist flotation, collapse, and lateral movement due to the effects of base-flood wind and water loads acting simultaneously on all building components, and the bottom of the lowest horizontal structural members of the lowest floor (excluding the pilings or columns) is elevated to at least the flood-protection elevation;
10 11 12 13	(3) has been certified by a licensed professional engineer or professional architect that it is securely anchored to adequately anchored pilings or columns so as to withstand velocity waters and hurricane wave wash and that it will meet the requirements of item (2) of this subsection;
14 15 16 17	(4) has no basement and has the space below the lowest floor free of obstructions (which space may not be used for human habitation, but may be used solely for parking, building access, or limited storage) [or] AND is constructed with breakaway walls, as that term is defined in ASCE 24, § 1.2 {"Definitions"} ; and
18	(5) does not utilize fill for structural support of structures.
19	(c) Required showings.
20 21	No new development in the Coastal High Hazard Area may be permitted unless the applicant demonstrates that:
22	(1) the encroachment into the Coastal High Hazard Area is the minimum necessary;
23 24	(2) the development will withstand, without damage, the wind and water loads attendant a base flood; and
25	(3) the development will not create an additional hazard to existing structures.
26	(d) Existing structures.
27 28	An existing nonconforming structure located on land below the level of the base flood may not be expanded, vertically, horizontally, or otherwise, unless:
29 30 31	 the foundation system is certified by a licensed professional engineer or professional architect as capable of supporting the existing structure and the proposed improvements during a base flood; and
32	(2) all construction is in full compliance with this and all other applicable laws.

1	(e) Manufactured homes or buildings.
2	The placement of manufactured homes or buildings is strictly prohibited.
3	(f) Record management.
4 5 6 7	For all new construction and every substantially improved structure in the Coastal High Hazard Area, the developer must submit and the Floodplain Manager must maintain on file an elevation certificate that certifies the elevation of the bottom of the lowest horizontal structural member of the lowest floor.
8	(g) Recreational vehicles.
9 10	 (1) In this subsection, "recreational vehicle" has the meaning stated in § 3-19 {"Recreational vehicles"} of this subtitle.
11	(2) In the Coastal High Hazard Area, recreational vehicles are prohibited.
12	Subtitle 4. Development Permits
13	§ 4-1. Permit required.
14	A Building permit issued by the Building Official under the Baltimore City Building Code:
15	(1) is required for all development in the Floodplain District; and
16 17 18	(2) may be granted only after necessary permits from the State Water [Management] & SCIENCE Administration and all other applicable Federal, State, and City agencies have been obtained and verified by the Planning Department.
19	§ 4-2. Applications.
20	(a) From and to whom submitted.
21 22	The application for the permit must be submitted by the owner or authorized agent of the owner to the Building Official.
23	(b) Required information.
24 25	The application must contain, in addition to the information otherwise required by the Building Official for a building permit, the following information:
26	(1) the name and address of the applicant;
27	(2) the name and address of the owner of land on which development is proposed;
28	(3) the name and address of the contractor;
29	(4) the site location;

1	(5) a plan of the site showing the size and location of the proposed development, as
2	well as any existing structures;
3	(6) plans, drawn to scale, that show the location, dimensions, and NAVD 88 elevation
4	of the site in relation to the stream channel[,] OR shoreline[,] and Floodplain
5	District DELINEATION;
6	(7) a summary description of the proposed work and estimated cost; and
7	(8) copies of all necessary permits from the State Water [Management] & SCIENCE
8	Administration and all other applicable Federal, State, and City agencies.
9	(c) Conditional information.
10	 Depending on the type of development or structure involved, the Floodplain Manager
11	may require:
12 13	(i) that an elevation certificate for the proposed development be submitted with the application; and
14 15	(ii) that the following information be shown on plans submitted with the application:
16 17	(A) the size of each proposed structure and the position on the lot where it is to be constructed;
18	(B) the elevations of the proposed final grading and lowest floor and the
19	existing ground and base-flood elevation, as certified by a licensed
20	land surveyor OR PROFESSIONAL ENGINEER; and
21	(C) the method of elevating the proposed structure, including details of
22	proposed fills, pile structures, retaining walls, foundations, erosion
23	protection measures, and the like.
24 25	(2) These plans must be prepared by a licensed professional engineer or professional architect.
26	(d) Appraisals for existing structures.
27	If substantial improvement to an existing structure is proposed, an appraisal must be
28	submitted by a professional real estate appraiser of the fair market value of the existing
29	structure, less land value.

1	§ 4-3. Plans for subdivisions or new development.
2	(a) <i>Plan drawing required</i> .
3 4 5	(1) Every proposal for the subdivision of land or for new development must include a plan that shows the location of all existing and proposed public and private utilities, facilities, drainage structure, and road access.
6 7 8	(2) If the base-flood elevation has been determined by the Flood Insurance Study or other reliable source, as provided in § 2-3 {"Official map"} of this Division I, that flood elevation must be delineated on the plan.
9 10 11 12 13 14	(3) If the proposal involves more than 5 lots or more than 5 acres and the base-flood elevation has not been determined for the land area, the developer must determine the base-flood elevation and delineate that flood elevation on the plan. If hydrologic and hydraulic engineering analyses are submitted, they must be certified in accordance with the requirements of the Maryland Department of the Environment and the Federal Emergency Management Agency.
15	(b) <i>Certification and review</i> .
16 17	All plans must be certified by a licensed professional engineer or professional architect and reviewed by the Department of General Services to assure that:
18	(1) all proposals are consistent with the need to minimize flood damage;
19 20	 (2) all necessary permits have been received from the State Water [Management] & SCIENCE Administration and appropriate Federal agencies;
21 22 23	 (3) all public and private utilities and facilities (including sewer, water, telephone, electric, gas, etc.) are located, constructed, and floodproofed to minimize or eliminate flood damage;
24	(4) adequate drainage is provided to reduce exposure to flood hazards;
25 26	(5) during a base flood, at least 1 access point provides safe vehicular access to and egress from the subdivision or new development; and
27 28	(6) adequate measures have been taken to minimize adverse environmental impacts of the proposed development.

1 § 4-4. Conformance to codes required.

A permit may be granted only after it has been determined that the proposed work will be in conformance with the requirements of this and all other applicable laws.

4 § 4-5. Alteration of watercourse.

5 (a) Notices required.

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- (1) When the proposed development includes the relocation or alteration of a watercourse, evidence must be presented as part of the permit application that all adjacent communities and the State Water [Management] & SCIENCE Administration have been notified by certified mail and have approved of the proposed alteration or relocation.
- (2) Copies of these notifications must then be forwarded to the Federal Emergency Management Agency, Federal Insurance Administration.
- 13 (b) Assurances of flood-carrying capacity.
- 14 In addition, the developer must assure the City, in writing, that the flood-carrying capacity 15 within the altered or relocated portion of the watercourse in question will be preserved.

16 § 4-6. Changes to application, permit, etc.

- After the issuance of a building permit by the Building Official, no changes of any kind may
 be made to the application, permit, or any of the plans, specifications, or other documents
 submitted with the application without the written consent or approval of the Building
 Official.
- 21 § 4-7. Inspections; permit revocation.
 - (a) Inspections by City and State.
 - (1) During the construction period, the Building Official must inspect the premises to determine that the work is progressing in compliance with the permit and with all applicable laws.
- 26 (2) The premises are also subject to inspection by the State Water [Management] &
 27 SCIENCE Administration.
- 28 (b) *Revocation of permit.*

If the Building Official determines that the work is not in compliance with the permit and
all applicable laws or that there has been a false statement or misrepresentation by the
applicant, the Building Official, on instruction from the Planning Department, may
revoke the permit and report that fact to the State Water [Management] & SCIENCE
Administration.

1	§ 4-8. Occupancy permit.
2	An occupancy permit issued by the Building Official:
3 4	(1) is required for all new construction and substantial improvements in the Floodplain District; and
5 6 7 8	(2) may not be issued until the Building Official has been provided with an elevation certificate that certifies the "as-built" elevations of the new construction or substantial improvements. WHEN APPLICABLE, A DRY FLOODPROOFING CERTIFICATE IS ALSO REQUIRED PRIOR TO THE APPROVAL OF THE OCCUPANCY PERMIT.
9	§ 4-9. Record of permit actions.
10	(a) Required.
11 12 13 14 15 16	A record of all permit actions in the Floodplain District, including all permits from applicable Federal, State, and City agencies, must be maintained by the Planning Department and must be made available on the request of the Federal Emergency Management Agency or the State Water [Management] & SCIENCE Administration during periodic assessments of Baltimore City's participation in the National Flood Insurance Program.
17	(b) Contents.
18	This record must include, at a minimum:
19	(1) the date the permit was issued;
20 21	(2) the "as-built" lowest floor elevation of all new construction or substantial improvement;
22	(3) a copy of all other elevation certificates submitted under this Division I;
23	(4) the issuance date of any occupancy permit; and
24	(5) any map amendments issued by the Federal Emergency Management Agency.
25	Subtitle 5. Floodplain Variances
26	§ 5-1. In general.
27 28 29	Applications for variances may be considered by the Planning Department, after a review by the City agencies responsible for stormwater management and erosion control, for the following:
30	(1) functionally dependent uses;

1 2	[(2) reconstruction, rehabilitation, or restoration of historic structures as provided in § 5-8 {"Historic structures"} of this subtitle;]
3	(2) [(3)] all necessary City utilities in the Floodway or the Coastal High Hazard Area; and
4	(3) [(4)] substantial improvements to an existing structure in the Floodway.
5	§ 5-2. Prohibited variances.
6	A variance may not be granted for:
7 8	(1) the placement of fill in the Floodway or the Coastal High Hazard Area unless approved by appropriate Federal and State agencies;
9 10	(2) new construction of any principal structure in the Floodway or the Coastal High Hazard Area; or
11 12	(3) manufactured homes or buildings within the Floodway and Coastal High Hazard Area.
13	§ 5-3. Considerations; Findings of fact.
14	(a) Request for MDE comments.
15	The Floodplain Manager must:
16 17	(1) request the NFIP State Coordinator, Maryland Department of the Environment, to comment on variance applications; and
18 19	(2) submit those comments, when received, to the DIRECTOR OF THE Planning Department.
20	(b) Factors to consider [– In general].
21	In considering a variance application, the Planning Department must consider and make
22 23	In considering a variance application, the Planning Department must consider and make findings of fact on all evaluations, [all] relevant factors, and [all] requirements specified
23 24	in this Division I[.] INCLUDING:
25	[(c) Factors to consider – Additional factors.]
26	[In considering a variance application, the Planning Department must also consider and
27	make findings of fact on the following additional factors:]
28	(1) the danger that materials may be swept onto other lands to the injury of others;
29	(2) the danger to life and property due to flooding or erosion damage;
30	(3) the susceptibility of the proposed development and its contents to flood damage
31	and the effect of that damage on the individual owner;

1 2	(4) the importance of the services to the community provided by the proposed development;
3 4	(5) the availability of alternative locations for the proposed use that are not subject to or are subject to less flooding or erosion damage;
5 6	(6) the need of a waterfront location for the proposed use and whether the proposed use is a functionally dependent use;
7	(7) the compatibility of the proposed use with existing and anticipated development;
8	(8) the relationship of the proposed use to the comprehensive plan for that area;
9 10	(9) the safety of access to the property in times of flood for passenger vehicles and emergency vehicles;
11 12	(10) expected heights, velocity, duration, rate of rise, and sediment transport of floodwaters and the effects of wave action, if applicable, expected at the site;
13 14 15	(11) the costs of providing government services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as streets, bridges, and sewer, gas, electrical, and water systems; [and]
16	(12) the comments provided by NFIP State Coordinator; AND
17 18	(13) THE INTENT OF ENVIRONMENTAL PROJECTS TAKING PLACE ON PUBLIC LAND, INCLUDING ASSOCIATED BENEFITS AND CO-BENEFITS.
19	§ 5-4. Limitations on granting variances.
20	The Planning Department may make an affirmative decision on a variance request only on:
21	(1) a showing of good and sufficient cause;
22 23 24 25	(2) a determination that failure to grant the variance would result in exceptional hardship due to the physical characteristics of the property (for which determination, increased cost or inconvenience of meeting the requirements of this Division I does not constitute an "exceptional hardship");
26 27 28 29	(3) a determination that the granting of a variance for development within a designated floodway, or within a Special Flood Hazard Area with base-flood elevations but no designated floodway, will not result in increased flood heights beyond that which is allowed by this Division I;
30 31 32	(4) a determination that the granting of a variance will not result in additional threats to public safety, extraordinary public expense, nuisances, fraud or victimization of the public, or conflict with existing local laws;

1 2	(5) a determination that the structure or other development is protected by methods to minimize flood damage; and
3 4	(6) a determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5	§ 5-5. Applications.
6	(a) In general.
7 8	The application for a variance must be submitted to the Planning Department and, to the greatest extent possible, must comply with the provisions of this Division I.
9	(b) <i>Notices to applicant.</i>
10	(1) The Planning Department must notify the applicant, in writing:
11	(i) of the increased premium rates for flood insurance; and
12 13	(ii) that construction below the level of the base flood increases risks to life and property.
14 15	(2) This notification must be maintained as part of the record required in § 5-7 {"Record of variance actions"} of this Subtitle.
16	§ 5-6. Agreement not to convert accessory structures.
17 18 19	The owner of any accessory structure for which a variance is granted must sign an agreement that the structure will never be converted to any use other than for parking vehicles or limited storage, AND THE DEED RESTRICTION MUST BE RECORDED WITH LAND RECORDS.
20	§ 5-7. Record of variance actions.
21	A record of all variance actions, including the justification for their issuance, must be:
22	(1) maintained by the Planning Department;
23	(2) included in the bi-annual report submitted to the Federal Insurance Administrator; and
24 25 26	(3) available on request to the Federal Emergency Management Agency or its authorized agent during periodic assessments of Baltimore City's participation in the National Flood Insurance Program.

1	[§ 5-8 .	Historic	structures.]
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[A variance may be issued for the reconstruction, rehabilitation, or restoration of an historic
structure only if:]

- 4 [(1) the activity does not cause an increase in the elevation of the base flood;]
- 5 [(2) all construction efforts are made to meet the intent of the provisions of this Division I 6 that deal with the elevation of electric, plumbing, mechanical, and other facility and 7 utility systems;]
- 8 [(3) all materials below the flood-protection elevation meet the requirements of this
 9 Division I for dry or wet floodproofing; and]
- 10 [(4) the reconstruction, rehabilitation, restoration, or other activity will not preclude the 11 structure's continued designation as an historic structure.]
- 12 § 5-8. {*Reserved*}
- 13 **§ 5-9.** Notice on deed.
- Notice of the flood hazard and the variance action must be placed on the deed that conveys
 title to land on which construction has occurred under this subtitle.
- 16Subtitle 6. Administration
- 17 § 6-1. Municipal non-liability.
- 18 The granting of a permit or approval is not a representation, guarantee, or warranty of any 19 kind and does not create or impose any liability on the City, its officials, employees, or 20 agents.
- 21 § 6-2. Administrative fees.
- 22 (a) *City may impose*.
- The City may impose additional application fees commensurate with those costs incurred
 in the processing, review, and evaluation of permit applications for development in the
 Floodplain District.
- 26 (b) *Costs included*.

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- 27 The costs covered by the fees may include:
 - (1) consultant fees for certification of as-built condition of structures;
- 29 (2) Floodplain District and subdistrict delineations;
- 30 (3) environmental impact characterizations;

1	(4) staff assignments; and
2	(5) other related costs.
3	Subtitle 7. Enforcement
4	§ 7-1. Compliance required.
5	(a) In general.
6 7 8 9	No structure or other development may be located, erected, constructed, reconstructed, improved, repaired, extended, converted, enlarged, or altered except in full compliance with this Division I and all other applicable Federal, State, and City laws, rules, and regulations.
10	(b) Noncompliance presumed without documentation.
11 12 13	A structure or other development without the required design certifications, elevation certificates, or other evidence of compliance is presumed to be noncompliant with and in violation of this Division I until the required documentation is provided.
14	(c) Noncompliant structures as public nuisance.
15 16 17 18	Any structure or other development that is located, erected, constructed, reconstructed, improved, repaired, extended, converted, enlarged, or altered in violation of this Division I or of any other applicable Federal, State, and City law, rule, or regulation is declared to be a public nuisance and abatable as such.
19	§ 7-2. {Reserved}
20	§ 7-3. Violation notice; Stop work order.
21	(a) In general.
22 23 24 25 26	If the Floodplain Manager finds that any development or person has failed to comply with or otherwise has violated any provision of this Division I, any provision of a rule or regulation adopted under this Division I, or any term or condition of a permit issued under this Division I, the Floodplain Manager may issue a violation notice and, for ongoing activities, a stop work order to:
27	(1) the person responsible for the violation or that person's authorized agent;
28	(2) the developer or owner of the development or that person's authorized agent; and
29	(3) on-site personnel.

1	(b) Service.
2	The violation notice must be served:
3	(1) in person;
4	(2) by certified or registered mail; or
5 6 7	(3) if the identity or whereabouts of the person responsible, developer, or owner is unknown, by posting a copy of the notice in a conspicuous place in or on the property.
8	(c) Contents.
9	The violation notice must:
10	(1) describe the nature of the violation;
11	(2) describe the remedial action needed to correct the violation; and
12	(3) specify a reasonable period of time within which to complete the remedial action.
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13	§ 7-4. Enforcement of notice or order.
13	§ 7-4. Enforcement of notice or order.
13 14 15 16	 § 7-4. Enforcement of notice or order. (a) <i>In general.</i> If a violation is not promptly discontinued or abated, or if the violation notice or order is not complied with promptly, the Floodplain Manager may institute or cause to be
13 14 15 16 17	 § 7-4. Enforcement of notice or order. (a) <i>In general.</i> If a violation is not promptly discontinued or abated, or if the violation notice or order is not complied with promptly, the Floodplain Manager may institute or cause to be instituted any appropriate legal proceeding.
13 14 15 16 17 18	 § 7-4. Enforcement of notice or order. (a) <i>In general.</i> If a violation is not promptly discontinued or abated, or if the violation notice or order is not complied with promptly, the Floodplain Manager may institute or cause to be instituted any appropriate legal proceeding. (b) <i>Types of proceedings.</i>
 13 14 15 16 17 18 19 	 § 7-4. Enforcement of notice or order. (a) In general. If a violation is not promptly discontinued or abated, or if the violation notice or order is not complied with promptly, the Floodplain Manager may institute or cause to be instituted any appropriate legal proceeding. (b) Types of proceedings. Enforcement proceedings may include:

1	(c) Remedies not exclusive.
2 3	In pursuing a violation, the Floodplain Manager may use any 1 or more available remedies or enforcement actions. The initiation of any 1 remedy or enforcement action
4 5 6	does not preclude pursuing any other remedy or enforcement action authorized by law. Neither damages, irreparable injury, nor the lack of an adequate remedy at law is a prerequisite to enforcement in equity.
7	Subtitle 8. Administrative and Judicial Review
8	§ 8-1. Administrative review – In general.
9	(a) <i>Right of appeal and hearing.</i>
10 11 12 13	Any person aggrieved by the action of the Floodplain Manager or other official charged with the enforcement of this Division I, whether as the result of the disapproval of an application, the issuance of a violation notice, an alleged failure to properly enforce this Division I, or otherwise:
14	(1) may appeal the action to the Planning Director; and
15	(2) on timely request, is entitled to a hearing on that appeal.
16	(b) When and how taken.
17	The appeal must:
18	(1) be in writing;
19	(2) state clearly the grounds on which the appeal is based;
20 21	(3) if the person aggrieved desires a hearing on the appeal, contain an express statement to that effect; and
22	(4) be filed with the Director within 10 days of the action in dispute.
23	§ 8-2. Administrative review – Delegation of hearing authority.
24	(a) In general.
25	Hearings may be conducted by:
26	(1) the Planning Director; or
27	(2) a hearing officer designated by the Planning Director.

1	(b) Scope of delegation.
2	The Director may delegate to a hearing officer the authority to issue:
3	(1) proposed or final findings of fact;
4	(2) proposed or final conclusions of law;
5	(3) proposed or final findings of fact and conclusions of law;
6	(4) proposed or final orders; or
7	(5) the final administrative decision of the Department.
8	§ 8-3. Administrative review – Conduct of hearing.
9	(a) Notice.
10 11	(1) The Planning Director must provide all parties reasonable written notice of the hearing.
12	(2) The notice must state:
13	(i) the date, time, place, and nature of the hearing;
14 15	(ii) the right of a party to be represented, at the party's own expense, by an attorney or, if permitted by law, other representative;
16 17	(iii) the right of a party to call witnesses and submit documents or other evidence under § 8-4 {"Administrative review – Evidence"} of this subtitle; and
18 19	(iv) that failure to appear for the scheduled hearing may result in an adverse action against the party.
20	(b) Hearings to be open and informal.
21 22	Except as otherwise provided by law or by rule or regulation of the Planning Director, all hearings must be:
23	(1) open to the public; and
24	(2) conducted in an orderly but informal manner.
25	§ 8-4. Administrative review – Evidence.
26	(a) In general.
27 28	Except as otherwise provided by this section or by rule or regulation of the Planning Director, formal rules of evidence and trial procedures do not apply.

1	(b) <i>Right to submit.</i>					
2	On a genuine issue of fact, a party is entitled to:					
3	(1) call witnesses;					
4	(2) offer evidence, including rebuttal evidence;					
5	(3) cross-examine any witness that another party or the Planning Director calls; and					
6	(4) present summation and argument.					
7	(c) <i>Scope</i> .					
8	The Planning Director or hearing officer:					
9 10	(1) may admit probative evidence that reasonable and prudent individuals commonly accept in the conduct of their affairs and give probative effect to that evidence;					
11	(2) may not exclude evidence solely on the basis that it is hearsay;					
12	(3) must give effect to a privilege recognized by law;					
13 14	(4) may receive documentary evidence in the form of copies or excerpts or through incorporation by reference;					
15 16 17	(5) may take official notice of a fact that is judicially noticeable or that is general, technical, or scientific and within the specialized knowledge of the Planning Department; and					
18	(6) may exclude evidence that is:					
19	(i) incompetent;					
20	(ii) irrelevant;					
21	(iii) immaterial; or					
22	(iv) unduly repetitious.					
23	§ 8-5. Administrative review – Final decisions.					
24	(a) Form and contents.					
25	A final decision must:					
26	(1) be in writing; and					
27	(2) contain separate statements of:					

1	(i) the findings of fact;						
2	(ii) the conclusions of law; and						
3	(iii) the decision or order.						
4	(b) Distribution.						
5 6	A copy of the final decision must be mailed or delivered to each party or that party's attorney of record.						
7	[§ 8-6. { <i>Reserved</i> }]						
8	§ 8-6. Administrative appeals.						
9	(A) APPEAL TO COMMISSION.						
10 11	AN APPLICANT WHO IS AGGRIEVED BY THE FINAL SITE PLAN DECISION OF THE DIRECTOR OF PLANNING MAY APPEAL THAT DECISION TO THE PLANNING COMMISSION.						
12	(B) WHEN FILED.						
13 14	Appeals must be filed within 30 days of the Planning Director's final decision as specified in § 8-5 {"Administrative review- Final decisions"} of this subtitle.						
15	(C) HEARING.						
16 17	THE PLANNING COMMISSION MUST REVIEW THE DIRECTOR'S DECISION AT A PUBLIC HEARING HELD WITHIN 45 DAYS OF RECEIVING THE APPEAL.						
18	§ 8-7. Judicial and appellate review.						
19	(a) Judicial review.						
20 21	A party aggrieved by a final decision of the Planning Department under this Division I may seek judicial review of that decision by petition to the Circuit Court for Baltimore						

may seek judicial review of that decision by petition to the Circuit Court for Baltimore
 City in accordance with the Maryland Rules of Procedure.

1	(b) <i>Appellate review</i> .
2 3	A party to the judicial review may appeal the court's final judgment to the Court of Special Appeals in accordance with the Maryland Rules of Procedure.
4	Subtitle 9. Penalties.
5	§ 9-1. In general.
6 7 8 9	Any person who violates or fails to comply with any provision of this Division I, any provision of a rule or regulation adopted under this Division I, or any term or condition of a permit issued under this Division I is guilty of a misdemeanor and, on conviction, is subject to a fine of not more than \$500 for each violation.
10	§ 9-2. DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT TO ENFORCE.
11 12 13	THIS DIVISION I MAY BE ENFORCED BY THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT IN THE MANNER PROVIDED IN § 104 {"DUTIES AND POWERS OF BUILDING OFFICIAL"} OF THE BALTIMORE CITY BUILDING CODE.
14	§ 9-3 [9-2]. Each day a separate offense.
15	(a) In general.
16	Every day that a violation continues is a separate offense.
17	(b) Prima facie proof of continuation.
18 19 20	Proof that a violation exists on any date that follows the issuance of a violation notice constitutes prima facie evidence that the violation has continued throughout the intervening period of time.
21	§ 9-4 [9-3]. Penalty no substitute for remediation.
22	(a) In general.
23 24	The imposition of a fine or penalty for a violation or noncompliance does not excuse the violation or noncompliance nor permit it to continue.
25	(b) Remediation still required.
26 27	All offenders are required to correct or remedy the violation or noncompliance within a reasonable time.

1	Baltimore City Code
2	Article 32. Zoning
3	Title 4. Development Reviews
4	Subtitle 2. Site Plan Review
5	§ 4-203. Applicability.
6	Site plan review is required for the following types of development applications:
7	(1) new construction that involves any of the following:
8 9 10	 (i) any proposed development over 15,000 square feet of gross floor area;
10 11 12	 (ii) developments with multiple structures on a single lot, excluding accessory structures; and
13 14	(iii) all multi-tenant commercial development, including mixed-use development;
15	(2) subdivision of land;
16 17 18 19	(3) additions or structural alterations to an existing structure, other than a single- family detached or semi-detached dwelling, that results in a 50% increase in gross floor area over the gross floor area of the existing structure prior to the addition or alteration;
20	(4) planned unit development;
21 22	(5) conditional use, unless the conditional use can and will be fully contained within an existing structure;
23	(6) parking lot or structures containing 5 or more motor vehicle parking spaces;
24 25 26 27	 (7) any development within an environmentally sensitive area, including projects in a [100-year floodplain] FLOODPLAIN DISTRICT and projects within the Buffer of the Critical Area (<i>See</i> Subtitle 3 {"Environmentally Sensitive Areas Review"} of this title);
28	(8) urban agriculture or community-managed open-space farm; and
29	(9) any development within the C-5-IH Subdistrict.

1	Title 7. Open-Space and Environmental Districts
2	Subtitle 3. Floodplain Overlay Zoning District
3	§ 7-301. Definitions.
4	(a) In general.
5 6	In this subtitle, the following terms have the meanings indicated.
7	(b) <i>Floodplain</i> .
8 9	"Floodplain" has the meaning stated in City Code Article 7 {"Natural Resources"}, $ 1-2(v) $ {"Definitions: Floodplain"}.
10	(c) Floodplain maps.
11 12 13 14 15	"Floodplain maps" means the series of maps and profiles known as the Flood Insurance Rate Maps and Flood Insurance Study for the City of Baltimore, dated [February 2, 2012] JUNE 16, 2021, as prepared, revised, or amended from time to time for the Federal Emergency Management Agency, Flood Insurance Administrator in accordance with City Code Article 7, Division I {"Floodplain Management"}.
16	(d) Floodplain Overlay Zoning District; FLOODPLAIN DISTRICT; Overlay District.
17 18	"Floodplain Overlay Zoning District", "FLOODPLAIN DISTRICT", or "Overlay District" means all areas shown as floodplains on the floodplain maps.
19	§ 7-304. Use regulations.
20	(b) <i>Floodway</i> .
21 22	The only uses allowed in the Floodway are the following recreational facilities, but not including accessory buildings:
23	(1) athletic fields; AND
24	[(2) golf courses; and]
25	(2) $[(3)]$ parks.

1	Baltimore City Revised Code						
2	Article – Building, Fire, and Related Codes						
3	Part II. International Building Code						
4	§ 2-103. City modifications.						
5	The additions, deletions, amendments, and other modifications adopted by the City are as						
6	follows:						
7	Chapter 1. Scope and Administration						
8	Section 107 Submittal Documents						
9	107.2.1 General requirements. The site plan must:						
10	1. show to scale the size and location of new construction and existing structures						
11 12	on the site, distances from lot lines, the established street grades, and the proposed finished grades,						
13 14	2. show, as applicable, Regulated Flood Hazard Areas, Floodways, and [design flood elevations] FLOOD PROTECTION ELEVATIONS,						
15	3. be drawn in accordance with an accurate boundary line survey, and						
16	4. comport with all other requirements of this section.						
17	Section 110 Inspections						
18	110.3.3 Lowest floor elevation. In a flood hazard area, on placement of the lowest floor [,						
19	including the basement,] and before undertaking any further vertical construction, the						
20	elevation certificate required by the Floodplain Management Code must be submitted to the						
21	Building Official.						
22	Chapter 16. Structural Design						
23	Section 1603 Construction Documents						
24	1603.1.7 Flood design data. For structures located in whole or in part in a flood hazard						
25	area, the documentation pertaining to design, if required by the Floodplain Management						
26	Code, must be included, and the following information, referenced to the datum on the City's						
27 28	Flood Insurance Rate Map (FIRM), must be shown, regardless of whether flood loads govern the design of the structure:						
20							
29	1. In flood hazard areas not subject to high-velocity wave action, the elevation of the						
30	proposed lowest floor[, including the basement].						

1 2				reas not subject			n, the eleva	tion to
3 4 5	which any nonresidential building will be dry floodproofed.3. In flood hazard areas subject to high-velocity wave action, the proposed elevation of the bottom of the lowest horizontal structural member of the lowest floor, including the basement.							
6		4. Any c	other docun	nentation requir	ed by the Floc	od Managemen	t Code.	
7			Par	t X. Internatio	onal Resident	ial Code		
8	§ 10-102.	City mod	ifications.					
9 10	The additions, deletions, amendments, and other modifications adopted by the City are as follows:							
11			Ch	apter 1. Scope	and Admini	stration		
12	SECTION 1	109 Inspe	CTIONS					
13 14 15 16	lowest floor [, including the basement,] and before undertaking any further vertical construction, the elevation certificate required by the Floodplain Management Code must be							
17 18 19		Table 301.2(1) Climatic and Geographic Design Criteria						
20 21		Ground Snow Load	Wind Speed	Wind Topographic Effects	Special Wind Region	Wind-Borne Debris Zone	Seismic Design Category	
22		30 psf	90 mph	No	No	No	В	
23			Weathering	Frost Line Depth	Te	rmite		-
24			Severe	30" (762 mm)		te to Heavy ht to Moderate]		
25 26 27		De	nter sign mp	Ice Barrier Underlayment Required	Air Freezing Index	Me: Ann Ten	ual	
28		13	° F	No	231	57°	F	

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Flood Hazards	5				
a. Entry into National Flood Insurance Program: 3/15 6/16/2021.	5/78. Updated Code: [4/2/14]				
b. Flood Insurance Study: Revised [4/2/14] 6/16/202	1.				
c. Panel numbers and dates of currently effective FIRMs:					
Panels	Ef fective Date				
0001 [E] F - 0005 [E] F 0008 [E] F - 0016 [E] F 0018 [F] G [- 0019 F] 0019 F 0020 [E] F - 0023 [E] F 0024 G - 0025 G [0024] 0026 F - [0036] 0028 F 0030 G 0031 F - 0033 F 0035 F 0036 G	$\begin{array}{c} 6/16/2021 \left[2/2/\\ 6/16/2021 \left[2/2/\\ 6/16/2021 \left[4/2/\\ 4/2/14 \\ 6/16/2021 \left[2/2/2\\ 6/16/2021 \\ 4/2/14 \\ 6/16/2021 \\ 4/2/14 \\ 4/2/14 \\ 4/2/14 \\ 6/16/2021 \end{array}$				

SECTION 3. AND BE IT FURTHER ORDAINED, That the catchlines contained in this Ordinance
 are not law and may not be considered to have been enacted as a part of this or any prior
 Ordinance.

22 SECTION 4. AND BE IT FURTHER ORDAINED, That:

- (a) this Ordinance applies to all development for which a permit application is filed (or required to be filed) on or after the effective date of this Ordinance;
- (b) except as expressly provided to the contrary in this Ordinance, any transaction, case, proceeding, investigation, or other matter validly begun before the effective date of this Ordinance and affected by or flowing from any law amended or repealed by this Ordinance, and any right, duty, or interest flowing from any ordinance amended or repealed by this Ordinance, remains valid after the effective date of this Ordinance and may be terminated, completed, enforced, or prosecuted as required or permitted by the prior law as though the amendment or repeal has not occurred; and
- (c) if any change in nomenclature involves a change in name or designation of any City
 agency or official, the successor agency or official has all the powers and obligations
 granted the predecessor agency or official.

35 SECTION 5. AND BE IT FURTHER ORDAINED, That this Ordinance takes effect on the date it is 36 enacted. COMMITTEE ON ECONOMIC AND COMMUNITY DEVELOPMENT

Bill 21-0040

AGENCY REPORTS

City Solicitor	Favorable/Comments
Office of Sustainability	Favorable
Planning Commission	Favorable
Board of Municipal Zoning Appeals	
Department of Housing and Community Development	Favorable
Department of Finance	

CITY OF BALTIMORE

BRANDON M. SCOTT Mayor



DEPARTMENT OF LAW JAMES L. SHEA 100 N. HOLLIDAY STREET SUITE 101, CITY HALL BALTIMORE, MD 21202

March 9, 2021

The Honorable President and Members of the Baltimore City Council Attn: Natawna B. Austin, Executive Secretary Room 409, City Hall, 100 N. Holliday Street Baltimore, Maryland 21202

Re: City Council Bill 21-0040 - Floodplain Management Code – Revision

Dear President and City Council Members:

The Law Department has reviewed City Council Bill 21-0040 for form and legal sufficiency. The bill modifies the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law. It incorporates certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers and defines and redefines certain terms, and repeals redundant, obsolete, or otherwise superfluous provisions. The bill corrects and conforms certain obsolete nomenclature and provides for an immediate effective date.

The Maryland Department of the Environment requires the revisions proposed in Council Bill 21-0040 if the City is to remain in compliance with the requirements of the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). These changes in turn were triggered by revisions to FEMA's Flood Insurance Rate Maps and associated Flood Insurance Study.

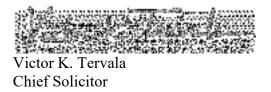
The Law Department notes that Council Bill 21-0040 includes text amendments to City Code Article 32 (the City's Zoning Code). In accordance with Article 32, text amendments are deemed "legislative authorizations." City Code, Art. 32, § 5-501(1). Certain hearting requirements therefore apply to the bill. *See* City Code, Art. 32, § 5-507. Moreover, the following standards must be considered by the City Council:

- (1) the amendment's consistency with the City's Comprehensive Master Plan;
- (2) whether the amendment would promote the public health, safety, and welfare;
- (3) the amendment's consistency with the intent and general regulations of this Code.

City Code, Art. 32, § 5-508. Article 32 also requires that certain notice be provided in advance of the bill's public hearing. City Code, Art. 32, § 5-601.

Provided all the procedural requirements are met, the Law Department is prepared to approve the bill for form and legal sufficiency as drafted.

Sincerely,



cc: James L. Shea, City Solicitor
 Nina Themelis, Mayor's Office of Government Relations
 Nikki Thompson, Director of Legislative Affairs
 Matthew Stegman, Director of Fiscal and Legislative Services
 Elena DiPietro, Chief Solicitor, General Counsel Division
 Hilary Ruley, Chief Solicitor
 Ashlea Brown, Assistant Solicitor

		UGNOMEWeilly			
FROM	NAME & TITLE	LISA MCNEILLY, SUSTAINABILITY DIRECTOR	CITY of	CITY	
	AGENCY NAME & ADDRESS	DEPARTMENT OF PLANNING 417 EAST FAYETTE STREET 8 th FLOOR	BALTIMORE		
	SUBJECT	CITY COUNCIL BILL #21-0040 FLOODPLAIN MANAGEMENT CODE REVISION	МЕМО	1797	
T	0		DATE:		

March 15, 2021

The Honorable President and Members of the City Council City Hall, Room 400 100 North Holliday Street

The Office of Sustainability is in receipt of City Council Bill #21-0040, which is for the purpose of adopting the preliminary Digital Flood Insurance Rate Maps (DFIRMs) and updating the floodplain management Code listed under Article 7 Division 1 of the Baltimore City Code.

The Baltimore Office of Sustainability (BOS) is tasked with the implementation and enforcement of the City's National Flood Insurance Program (NFIP), which is a voluntary program managed by the Federal Emergency Management Agency (FEMA). The benefit of NFIP participation is that the program makes available federally subsidized flood insurance to properties located in member jurisdictions. Mandatory NFIP compliance activities include permit review for projects located in the regulatory floodplain to ensure that proposed designs are compliant with the floodplain Code, collection and storage of elevation certificates and dryfloodproofing certificates, adoption and distribution of DFIRMs, public outreach related to flood awareness and preparedness, among other tasks as required by FEMA.

The City is required to adopt this new DFIRM by June 16, 2021. As part of that approval process, we have also proposed updates to the floodplain policy to ensure that the policy is transparent and clear to the residents of the City of Baltimore and implementable in an older, developed city. The proposed updates also clarify certain requirements, incorporate flexibility to allow for beneficial environmental outcome, and maintain participation in the NFIP.

The Office of Sustainability fully supports City Council Bill #21-0040.

cc: Ms. Natasha Mehu, Mayor's Office
Ms. Nina Themelis, Mayor's Office
Mr. Matt Stegman, City Council President's Office
Ms. Nikki Thompson, City Council President's Office
Ms. Natawna Austin, Council Services
Mr. Matthew Peters, Council Services
Ms. Kathleen Byrne, BMZA
Mr. Geoffrey Veale, Zoning Administration
Ms. Stephanie Murdock, DHCD
Mr. Chris Ryer, Department of Planning

	NAME & TITLE AGENCY NAME & ADDRESS		CITY of BALTIMORE MFMO	CITY OF
	SUBJECT	CITY COUNCIL BILL #21-0040 / FLOODPLAIN MANAGEMENT CODE – REVISION	MEMO	1797
Т	0	The Honorable President and Members of the City Council	DATE: February 26,	2021

The Honorable President and Members of the City Council City Hall, Room 400 100 North Holliday Street

At its regular meeting of February 25, 2021, the Planning Commission considered City Council Bill #21-0040, for the purpose of modifying the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law; incorporating certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers; defining and redefining certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting and conforming certain obsolete nomenclature; providing for a special effective date; and generally relating to the protection, maintenance, and enhancement of the public health, safety, and welfare through floodplain management.

In its consideration of this Bill, the Planning Commission reviewed the attached staff report, which recommended approval of City Council Bill #21-0040 and adopted the following resolutions; eight members being present (seven in favor, with one abstention):

RESOLVED, That the Planning Commission concurs with the recommendation of its departmental staff, and recommends that City Council Bill #21-0040 be passed by the City Council.

If you have any questions, please contact Ms. Lisa McNeilly, Director of Sustainability, Department of Planning at 410-396-8360.

CR/ewt

attachment

cc: Ms. Natasha Mehu, Mayor's Office
Ms. Nina Themelis, Mayor's Office
The Honorable Eric Costello, Council Rep. to Planning Commission
Mr. Matthew Stegman, City Council President's Office
Ms. Nikki Thompson, City Council President's Office
Mr. Colin Tarbert, BDC
Ms. Kathleen Byrne, BMZA
Mr. Geoffrey Veale, Zoning Administration
Ms. Stephanie Murdock, DHCD
Ms. Elena DiPietro, Law Dept.
Mr. Francis Burnszynski, PABC
Mr. Liam Davis, DOT
Ms. Natawna Austin, Council Services
Mr. Dominic McAlily, Council Services



Brandon M. Scott

Mayor

PLANNING COMMISSION

Sean D. Davis, Chairman

STAFF REPORT



Chris Ryer Director

February 18, 2021

REQUEST: Floodplain Bill Approval – CCB 21-0040

RECOMMENDATION: Approval

STAFF: Bruna Attila

PETITIONERS: The Department of Planning

OWNERS: Multiple Owners

GENERAL AREA

The CCB 21-0040 encompasses the regulatory floodplain areas, as mapped by FEMA.

BACKGROUND

FEMA released a new DFIRM, or Digital Flood Insurance Rate Map, based on new flood data for Baltimore City in 2018, and since then the City has been following the necessary steps for the new maps to become effective by 6/16/2021 as required by FEMA. As part of the adoption process, the City also plans to update its floodplain policy (Article 7, Division 1 of the City Code) based on FEMA requirements and with the intent to make the Code more transparent and implementable.

ANALYSIS

The City must adopt the new DFIRM and Code update by the deadline in order to maintain its participation in the National Flood Insurance Program, which makes available federally subsidized flood insurance to Baltimore residents. The City's participation in the FEMA's Community Rating System program, which provides a 25% or 10% discount on federally subsidized flood insurance rates, also depends on the new DFIRM and updated Code becoming effective by June 16, 2021.

CITY AGENCY AND PUBLIC ENGAGEMENT

City Agencies

• A meeting with City agencies that must comply with floodplain requirements was held in December 2021 to describe the proposed changes and collect comments. The agencies present included: DPW, DGS and DOT.

Public

- The Department of Planning Office of Sustainability hosted two virtual meetings on 1/12/2021 where we presented the proposed changes.
- The draft Floodplain Code was posted for public comment from 1/4/2021 to 1/31/2021.
- A total of 22 comments were received. Most of the comments were suggestions for language clarifications and were incorporated into the plan when appropriate.
- The public comment period and public meetings were advertised through a (3) email blasts that reaches around 22,000 recipients (GovDelivery).
- Extensive social media outreach was performed to advertise the public comment and public meetings.
- The public comment period and public meetings were advertised in (5) newsletters:
 - (3) Office of Sustainability Newsletters that reach around 5,000 recipients
 - (2) Department of Planning Newsletters (Compass) that reach around 22,000 recipients

Chris Ryer Director



BALTIMORE CITY DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT

MEMORANDUM

To: The Honorable President and Members of the Baltimore City Council c/o Natawna Austin, Executive Secretary

From: Alice Kennedy, Acting Housing Commissioner



Date: March 23, 2021

Re: City Council Bill 21-0040 Floodplain Management Code - Revision

The Department of Housing and Community Development (DHCD) has reviewed City Council Bill 21-0040 for the purpose of of modifying the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law; incorporating certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers; defining and redefining certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting and conforming certain obsolete nomenclature; providing for a special effective date; and generally relating to the protection, maintenance, and enhancement of the public health, safety, and welfare through floodplain management.

The City must adopt the new Digital Flood Insurance Rate Map and Code update by June 16, 2021 in order to remain in compliance with the requirements of the National Flood Insurance Program, which makes available federally subsidized flood insurance to Baltimore residents. This revision to the Flood Plain Management Code is necessary to protect property owners by clarifying requirements, incorporating flexibility and maintaining participation with the National Flood Insurance Program.

City Council Bill 21-0040 would make various changes to the Natural Resources Article, the Zoning Article and the Building, Fire, and Related Codes (BFRC). Related to DHCD, this legislation proposes several changes to the recently enacted BFRC, which went into effect May 18, 2020. If enacted, CCB 21-0040 would update Chapter 1 (Scope and Administration) of the BFRC; by clarifying language in Section 107, which addresses submittal documents required with a site plan, and replaces the language "Design Flood Elevations" with "Flood Protection Elevations."

The legislation would also remove redundant language, in several locations of the BFRC including; Chapter 1 Section 110 (Inspections), Chapter 16 (Structural Design) Section 1603 (Construction Documents - Flood Design Data), and Chapter 1 Section 109 (Floodplain inspections) of Part X of the IRC, by deleting "including the basement" in favor of "on placement of the lowest floor." This language is redundant and is no longer needed.



BALTIMORE CITY DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT

Additionally, CCB 21-0040 would make a change to Part X of the International Residential Code related to the climatic and geographic design criteria for termites in Table 301.2(1) Chapter 3 (Building Planning) Section 301 (Design Criteria), from defining decay as "Slight to Moderate" to "Moderate to Heavy."

Finally, the legislation updates various flood hazard effective dates such as; Entry into National Flood Insurance Program, Flood Insurance Study and Panel numbers and dates of currently effective FIRM.

DHCD does not anticipate an operational or fiscal impact from the revisions proposed in Council Bill 21-0040. The legislation will allow the City to remain in compliance with the requirements of the National Flood Insurance Program and will ensure efficient and flexible building design and construction that will protect the health and safety of our City and encourages the use of the latest studies and data for flood plain management.

DHCD supports the passage of City Council Bill 21-0040.

417 East Fayette Street • Baltimore, MD 21202 • 443-984-5757 • dhcd.baltimorecity.gov

COMMITTEE ON ECONOMIC AND COMMUNITY DEVELOPMENT

Bill 21-0040

Amendments

MIDDLETON (1) 04MAY21

MIDDLETON (1) 04MAY21

AMENDMENTS TO COUNCIL BILL 21-0040 (1st Reader Copy)

By: Councilmember Middleton

{To be offered to the Economic and Community Development Committee}

Amendment No. 1

On page 1, in line 18, strike ", 7-304(b)"; and, on page 62, strike lines 19 through 25 in their entireties.



National Flood Insurance Program Community Rating System

A Local Official's Guide to Saving Lives, Preventing Property Damage, and Reducing the Cost of Flood Insurance

FEMA B 573 / 2018





Every year, flooding causes hundreds of millions of dollars' worth of damage to homes and businesses around the country. Standard homeowners and commercial property insurance policies do not cover flood losses. To meet the need for this vital coverage, the Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP).

The NFIP offers reasonably priced flood insurance to all properties in communities that comply with minimum standards for floodplain management.

The NFIP's Community Rating System (CRS) credits community efforts beyond those minimum standards by reducing flood insurance premiums for the community's property owners. The CRS is similar to—but separate from the private insurance industry's programs that grade communities on the effectiveness of their fire suppression and building code enforcement efforts.

CRS discounts on flood insurance premiums range from 5% up to 45% (see Table 1), based on CRS credit points that are awarded to communities. The discounts provide an incentive for communities to implement new flood protection activities that can help save lives and property when a flood occurs.

The CRS provides credit under 19 public information and floodplain management activities described in the *CRS Coordinator's Manual.*

You're probably already doing many of these activities. To get credit, community officials will need to prepare documentation that verifies these efforts.

The CRS assigns credit points for each activity. Table 2 lists the activities and the possible number of credit points for each one. The table also shows the average number of credit points communities earn for each activity. These averages may give you a better indication than the maximums of what your community can expect.

To be eligible for a CRS discount, your community must do Activity 310, Elevation Certificates. If you're a designated repetitive loss community, you must also do Activity 510, Floodplain Management Planning. All other activities are optional.



Based on the total number of points your community earns, the CRS assigns you to one of ten classes. Your discount on flood insurance premiums is based on your class.

For example, if your community earns 4,500 points or more, it qualifies for Class 1, and property owners in the in the Special Flood Hazard Area (SFHA) get a 45% discount on their insurance

premiums. If your community earns as little as 500 points, it's in Class 9, and property owners in the SFHA get a 5% discount. If a community does not apply or fails to receive at least 500 points, it's in Class 10, and property owners get no discount.

Table 1, below, shows the number of points required for each class and the corresponding discount.

Table 1. How much discount property owners in your community can get

Rate Class	Discount for SFHA*	Discount for Non-SFHA**	Credit Points Required
1	45%	10%	4,500 +
2	40%	10%	4,000–4,499
3	35%	10%	3,500–3,999
4	30%	10%	3,500–3,499
5	25%	10%	3,000–2,999
6	20%	10%	2,500–2,499
7	15%	5%	1,500–1,999
8	10%	5%	1,000–1,499
9	5%	5%	500–999
10	0	0	0–499

* Special Flood Hazard Area

** Preferred Risk Policies are available only in B, C, and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. Although they are in SFHAs, Zones AR and A99 are limited to a 5% discount. Premium reductions are subject to change.

Table 2.

What You Can Do to Get Credit

The CRS grants credit for 19 different activities that fall into four series:

Series 300	Public Information		Maximum Points*	Average Points *
	This series credits programs that advise peop about the flood hazard, flood insurance, and ways to reduce flood damage. The activities also provide data insurance agents need for accurate flood insurance rating.			
310	 Elevation Certificates Maintain FEMA elevation certificates for new construction in the floodplain. (At a minimum, a community must maintain certificates for building built after the date of its CRS application.) 	gs	116	38
320	 Map Information Service Provide Flood Insurance Rate Map information to those who inquire, and publicize this service.)	90	73
330	 Outreach Projects Distribute outreach projects with messages about flood hazards, flood insurance, flood protection measures, and/or the natural and beneficial function of floodplains. 	ons	350	87
340	 Hazard Disclosure Real estate agents advise potential purchasers of flood-prone property about the flood hazard. Regulations require notice of the hazard. 		80	14
350	 Flood Protection Information The public library and/or community's website maintains references on flood insurance and flood protection. 	đ	125	38
360	 Flood Protection Assistance Give inquiring property owners technical advice of how to protect their buildings from flooding, and publicize this service. 	on	110	55
370	 Flood Insurance Promotion Assess flood insurance coverage within the community and implement a plan to promote floor insurance. 	od	110	39
	Series 300 To	tal	981	3448

*Maximum and average points are subject to change. See the current CRS Coordinator's Manual for the latest information.

Series 400	Mapping & Regulations	Maximum Points*	Average Points *
410	 This series credits programs that limit floodplain development or provide increased protection to new and existing development. Floodplain Mapping Develop new flood elevations, floodway delineations wave heights, or other regulatory flood hazard data for an area not mapped in detail by the flood insurance study. 	802	60
420	 Have a more restrictive mapping standard. Open Space Preservation Guarantee that currently open public or private floodplain parcels will be kept free from development. Zone the floodplain for minimum lot sizes of 5 acres or larger. 	2,020	509
430	 Higher Regulatory Standards Limit new buildings and/or fill in the floodplain. Require freeboard. Require soil tests or engineered foundations. Require compensatory storage. Require coastal construction standards in AE Zones. Have regulations tailored to protect critical facilities or areas subject to special flood hazards (for example alluvial fans, ice jams, subsidence, or coastal erosion). 	2,042	270
440	 Flood Data Maintenance Keep flood and property data on computer records. Use better base maps. Maintain elevation reference marks. 	222	115
450	 Stormwater Management Regulate new development throughout the watershed to ensure that post-development runoff is no greater than pre-development runoff. Regulate new construction to minimize soil erosion and protect or improve water quality. 	755	132
	Series 400 Total	5,841	1,086

Series 500	Flood Damage Reduction	Maximum Points*	Average Points *
	This series credits programs that reduce the flood risk to existing development.		
510	 Floodplain Management Planning Prepare, adopt, implement, and update a comprehensive flood hazard mitigation plan using a standard planning process. Prepare an analysis of the repetitive flood loss areas within the community. 	622	175
	Note: category C repetitive loss communities must receive credit for either the floodplain management plan or the repetitive loss area analysis, above.		
	• Prepare, adopt, implement, and update a plan to protect natural functions within the community's floodplain.		
520	Acquisition and RelocationAcquire and/or relocate floodprone buildings so that	2,250	195
	they are out of the floodplain.		
530	Flood Protection	1,600	73
	 Protect existing floodplain development by floodproofing, elevation, or minor flood control projects. 		
540	 Drainage System Maintenance Have a program for and conduct annual inspections of all channels and detention basins; remove debris as needed. 	570	218

Series 500	Total	5,042	661
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Series 600	Flood Preparedness		Maximum Points*	Average Points *
	This series credits flood warning, levee sa and dam safety projects.	ıfety,		
610	 Flood Warning and Response Provide early flood warnings to the public, and detailed flood response plan keyed to flood cree predictions. 		395	254
620	Levees • Annually inspect and maintain existing levees; system for recognizing the threat of levee failu overtopping, disseminating warnings, and prov emergency response; and coordinate with oper critical facilities.	re and/or /iding	235	157
630	 Dams Have a high-hazard-potential dam that could affect the community; have a system for recognizing the threat of dam failure, disseminating warnings, planning and practicing emergency responses; and coordinating with operators of critical facilities. 		160	35
	Series 600	Total	790	446
	All Series	Total	12,654	2,537



Your community can get additional credit for regulating development outside the SFHA to the same standards as development inside the SFHA. There is also credit for assessing future flood conditions, including the impacts of future development, urbanization, and changing weather patterns. See the *CRS Coordinator's Manual* for full details.

Many communities can qualify for what the CRS calls "state-based credit," based on the activities or regulations a state or regional agency implements within communities. For example, some states have disclosure laws eligible for credit under Activity 340 (Hazard Disclosure). Any community in those states can receive the state-based credit. Your community may want to consider floodplain management activities not listed in the *CRS Coordinator's Manual.* You should evaluate these activities for their ability to increase public safety, reduce property damage, avoid economic disruption and loss, and protect the environment. In addition, you can request a review of these activities to determine whether they could be eligible for CRS credit. FEMA welcomes innovative ways to prevent or reduce flood damage.



Participation in the CRS is voluntary. If your community is in full compliance with the rules and regulations of the NFIP, you may apply. There's no application fee, and all CRS publications are free.

Your community's chief executive officer (your mayor, city manager, or other top official) must appoint a CRS coordinator to serve as the liaison between the community and FEMA. The coordinator should know the operations of all departments that deal with floodplain management and public information. And the coordinator should be able to speak for the community's chief executive officer.

To begin the application process, your community submits a letter of interest to your FEMA Regional Office and documents that you are implementing floodplain management activities that warrant at least 500 CRS credit points. On the <u>CRS Resources website</u> (www.CRSresources.org) you can find a sample letter; the CRS Quick Check, a tool that helps you assess your community's possible credit points; and further instructions. You may also want to download from that website a copy of the *CRS Coordinator's Manual*, which describes the program in full and provides specific information, including eligible activities, required documentation, and resources for assistance.

Help is also available through the contact information below.

CRS-related materials and many more resources are available at the <u>CRS</u> <u>Resources website</u> and on <u>FEMA's</u> <u>website</u> (https://www.fema.gov/ national-flood-insurance-programcommunity-rating-system).

After your community applies for a CRS classification, the CRS will verify the information and arrange for flood insurance premium discounts.

For more info, write, phone, or fax:

NFIP/CRS

P.O. Box 501016 Indianapolis, IN 46250-1016 (317) 848-2898 Fax: (201) 748-1936 e-mail: <u>nfipcrs@iso.com</u> [blank page]



