

Sec. 1105 - Floodplain management regulations.

*(Amended 5-4-2010 - TXT-2010-02, §§ 1—21)*

Article IX, Section II of the Constitution of the State of Georgia and Section 36-1-20 (a) of the Official Code of Georgia Annotated have delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. There, Douglas County, Georgia, does ordain this ordinance and establishes this set of floodplain management and flood hazard reduction policies for the purpose of regulating the use of flood hazard areas. It is determined that the regulation of flood hazard areas and the prevention of flood damage are in the public interest and will minimize threats to public health and safety, as well as to private and public property.

**1105 (a) Floodplain management regulations; purpose and policy.**

The purpose of the floodplain management regulations set forth in this Section is to protect, maintain, and enhance the public health, safety, environment, and general welfare and to minimize public and private losses due to flood conditions in flood hazard areas, as well as to protect the beneficial uses of floodplain areas for water quality protection, stream bank and stream corridor protection, wetlands preservation, and ecological and environmental protection by provisions designed to:

- (1) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- (2) Restrict or prohibit uses which are dangerous to health, safety, and property due to flooding or erosion hazards, or which increase flood heights, velocities, or erosion;
- (3) Control filling, grading, dredging, and other development that may increase flood damage or erosion;
- (4) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands;
- (5) Limit the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; and,
- (6) Protect the stormwater management, water quality, stream bank protection, stream corridor protection, wetland preservation, and ecological functions of natural floodplain areas.

**1105 (b) Definitions related to floodplain management.**

The following definitions shall apply to Section 9 of these Rules and Regulations:

*Addition (to an existing building):* Any walled or roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition that is connected by a firewall or is separated by an independent perimeter load-bearing wall shall be considered New Construction.

*Adjacent to the Floodplain:* All land within a development that would flood if the one hundred-year (100-year) flood elevation increase by ten (10) feet.

*Appeal:* A request for a review of the Authority's Engineering Department's interpretation of any provision of this ordinance.

*Area of Shallow Flooding:* A designated AO or AH Zone on the applicable local Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

*Area of Special Flood Hazard:* The land in the floodplain subject to a one percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, Areas of Special Flood Hazard shall be those designated by the local community and referenced in Section 1105(e). This includes all floodplain and flood prone areas at or below the base flood elevation (including A, A1-30, A-99, AE, AO, AH and AR on the FHBM or the FIRM) and all floodplain and flood prone areas at or below the future-conditions flood elevation. All streams with a drainage area of one hundred (100) acres or greater shall have the area of Special Flood Hazard delineated.

*Authority:* The Douglasville-Douglas County Water and Sewer Authority and/or its authorized agents or representatives.

*Base Flood:* The flood having a 1% or greater chance of being equaled or exceeded in any given year (i.e., the "100-year flood").

*Base Flood Elevation:* The highest water surface elevation anticipated at any given point during the base flood.

*Basement:* That portion of a building having its floor subgrade (below ground level) on at least one side.

*Building:* See "Structure."

*County:* Unincorporated Douglas County, Georgia and/or its governing authority or authorized agents or representatives.

*Development:* Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, clearing, grubbing, grading, paving, any other installation of impervious cover, excavation or drilling operations or storage of equipment or materials.

*Elevated Building:* A non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.

*Existing Construction:* Any structure for which the "start of construction" commenced before February 3, 1987 for structures within unincorporated Douglas County.

*Existing Manufactured Home Park or Subdivision:* A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before ~~February 3, 1987~~, January 1, 1980, for structures within unincorporated Douglas County.

*Expansion to an Existing Manufactured Home Park or Subdivision:* The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

*Fair Market Value:* The pre-flood market value as determined by an independent property appraisal by a licensed/certified appraiser or the recorded property value assessed by the Douglas County Tax Assessor.

*FEMA:* The Federal Emergency Management Agency.

*Flood or Flooding:* A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters; or

- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

*Flood Hazard Boundary Map (FHBM):* An official map of a community, issued by the Federal Insurance Administration, where the boundaries of area of special flood hazard have been defined as Zone A.

*Flood Insurance Rate Map (FIRM):* An official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

*Flood Insurance Study (FIS):* The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.

*Floodplain:* Any land area susceptible to flooding.

*Floodway or Regulatory Floodway:* The channel of a stream or other watercourse and the adjacent areas of the floodplain which is necessary to contain and discharge the base flood flow without cumulatively increasing the base flood elevation more than one foot.

*Floodproofing:* Any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

*Functionally Dependent Use:* A use that cannot perform its intended purpose unless it is located or carried out in close proximity to water.

*Future-Conditions Flood:* The flood having a one percent (1%) chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100 year Future-Conditions Flood.

*Future-Conditions Floodplain:* Any land area susceptible to flooding by the future-conditions flood.

*Future-Conditions Flood Elevation:* The flood standard equal to or higher than the Base Flood Elevation. The Future-Conditions Flood Elevation is defined as the highest water surface at any given point during the Future-Conditions Flood.

*Future-Conditions Hydrology:* The flood discharge associated with projected land-use conditions based on zoning maps and future land use maps without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or waterway, such as a bridge and culvert construction, fill and excavation.

*Highest Adjacent Grade:* The highest natural elevation of the ground surface, prior to construction, adjacent to the proposed foundation of a building.

*Historic Structure:* Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:

- a. By an approved state program as determined by the Secretary of the Interior, or
- b. Directly by the Secretary of the Interior in states without approved programs.

*Land Development Activities:* Those actions or activities that comprise, facilitate or result in developments.

*Land Development Project:* A discrete land development undertaking.

*Lowest Floor:* The lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of this code.

*Manufactured Home:* A building, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term includes any structure commonly referred to as a "mobile home" regardless of the date of the manufacture. The term also includes parked trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive date or longer and intended to be improved property.

*May:* A regulation or requirement that is permissive.

*Mean Sea Level:* The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this Code, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1988.

*National Geodetic Vertical Datum (NGVD):* As corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the floodplain.

*New Construction:* Means any "structure" for which the "start of construction" commenced after February 3, 1987, for structures within unincorporated Douglas County and includes any subsequent improvements to the structure.

*New Manufactured Home Park or Subdivision:* A manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after ~~February 3, 1987~~ January 1, 1980, for structures within unincorporated Douglas County.

*North American Vertical Datum (DAVD) of 1988:* A vertical control used as a reference for establishing varying elevations within the floodplain.

*Ordinance:* Refers to this Ordinance, means Article 11 of the Unified Development Code regarding Floodplain Management and any applicable provisions set forth in the Authority's Design and Construction Standards.

*Owner:* The legal or beneficial owner of a site, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

*Permit:* The land development permit issued by the County and released by the Authority to the applicant, which is required for undertaking any land development activity.

*Recreational Vehicle:* A vehicle that is:

- (1) Built on a single chassis;
- (2) Four hundred (400) square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by light duty truck and,

- (4) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel or seasonal use.

*Regulatory Floodplain:* The future-conditions one hundred-year (100-year) floodplain where available. Where the future-conditions base floodplain has not been determined, the regulatory floodplain means the existing one hundred-year (100-year) base floodplain.

*Repetitive Loss:* Flood-related damages sustained by a structure on two separate occasions during a ten-year (10-year) period for which the cost of repairs at the time of each such flood event, on the average equals or exceeds twenty-five percent (25%) of the market value of the structure before the damages occurred.

*Section:* When referring to this Section, includes all provisions set forth in Chapter 9 of the Authority's Rules and Regulations and all applicable provisions of the Authority's Design and Construction Standards adopted in conjunction herewith.

*Shall:* The regulation or requirement is mandatory.

*Site:* The parcel of land being developed or the portion thereof on which the land development project is located.

*Start of Construction:* The date the permit was issued, provided the actual start of construction, repair, reconstruction or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of the structure, such as pouring of slabs or footing, installation of pipes, construction of columns, or any work beyond the stage of excavation, and includes the placement of a manufactured home on a foundation. Permanent construction does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structures, such as garages or shed not occupied as dwelling units or part of the main structure. (Note: Accessory structures are not exempt from any requirement of this Section.) For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

*Structure:* A walled and roofed building that is principally above ground, a manufactured home, or a gas or liquid storage tank.

*Subdivision:* The division of a tract or parcel of land resulting in one or more new lots or building sites for the purpose, whether immediately or in the future, of sale, other transfer of ownership, or land development, and includes division of land resulting from or made in connection with the layout of development of a new street or roadway or a change in an existing street or roadway.

*Substantial Damage:* Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. Damage could be from a single event or cumulative damage for a period not to exceed ten (10) years.

*Substantial Improvement:* Any combination of repairs, reconstruction, alteration, or improvements to a building, taking place during a ten-year (10-year) period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure prior to the improvement. The market value of the building means (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures that have incurred "substantial damage" regardless of the actual amount of repair work performed. For the 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 building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include those improvements of a building required to comply with existing health, sanitary, or safety code

specifications which are solely necessary to assure safe living conditions, which have been pre-identified by the Authority or any County Code Enforcement official, and not solely triggered by an improvement or repair project.

*Substantially Improved Existing Manufactured Home Park or Subdivision:* is where the repair, reconstruction, rehabilitation, or improvement of the streets, utilities, and pads equals or exceeds 50% of the value of the streets, utilities, and pads before the repair, reconstruction, or improvement commenced.

*Variance:* A grant of relief from the requirements of this Article, which permits construction in a manner otherwise prohibited by this Article.

*Variance Board:* The Appeal Panel designated by the Authority, which shall include the Executive Director, the Chief Financial Officer of the Authority and Authority Counsel, or their designees, which shall hear and decide appeals and requests for variances from the requirements of this Article.

*Violation:* The failure of a structure or other development to be fully compliant with the floodplain management regulations. A structure or other development without a required elevation certificate, other certificates, or other evidence of compliance required in this Section 1105, is presumed to be a violation until such time as that documentation is provided.

#### **1105 (c) Floodplain management regulations; applicability.**

This Section shall be applicable to all Areas of Special Flood Hazard within Douglas County, i.e. floodplain and flood prone areas as defined herein at or below the base flood elevation or the regulatory flood elevation (including A, AO, AH, AE, A1-30, or A-99 on the FIRM), and all new or substantial improvement residential units, all subdivisions, non-residential structures, manufactured home, recreational vehicles, and utilities located within these areas. In addition, all streams within a drainage area of 100 acres or more have an area of special flood hazard.

#### **1105 (d) Designation of administrator.**

The Authority's Engineering Department is hereby appointed to administer, implement and enforce the provision of this Section.

#### **1105 (e) Basis for area of special flood hazard; flood area maps and studies.**

For the purposes of this Section, the following are adopted by reference:

- (1) The Flood Insurance Study (FIS) for Douglas County, Georgia, dated August 18, 2009, as amended, with accompanying maps and other supporting data and any revision thereto. For those land areas acquired through annexation, the current effective FIS and data for unincorporated Douglas County are hereby adopted by reference.
- (2) Other studies which may be relied upon for the establishment of the base flood elevation of delineation of the one hundred-year (100-year) floodplain include:
  - a. Any flood or flood-related study conducted by the United States Corps of Engineers or the United States Geological Survey applicable to Douglas County, Georgia; or
  - b. Any base flood study authored by a registered professional engineer in the State of Georgia that has been approved by the Authority and Douglas County, Georgia, as applicable.
- (3) Other studies that may be relied upon for the establishment of the regulatory flood elevation or delineation of the regulatory floodplain include:
  - a. Any flood or flood-related study conducted by the United States Corps of Engineers or the United States Geological Survey applicable to Douglas County, Georgia; or

- b. Any future-conditions flood study using FEMA approved methods authored by a registered professional engineer in the State of Georgia that has been approved by the Authority and Douglas County, Georgia, as applicable.
- (4) The repository for public inspection of the flood studies, accompanying maps and other supporting data is located in the Development Control Department of Douglas County.

**1105 (f) Compatibility with other regulations.**

The regulations set forth in this Section are not intended to modify or repeal any other ordinance, rule, regulation, resolution, statute, easement, covenant, deed restriction, or other provision of law. The requirements of this Section are in addition to the requirements of any other ordinance, rule, regulation, resolution, or other provision of law, and where any provision of this Section imposes restrictions different from those imposed by any other ordinance, rule, regulation, resolution, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

**1105 (g) Severability.**

If the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph subdivision or clause of this ordinance.

**1105 (h) Warning and disclaimer of liability.**

The degree of flood protection required by this Section 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 manmade or natural causes. This Section does not imply that land outside the Areas of Special Flood Hazard or uses permitted within such areas will be free from flooding or flood damages. This Section shall not create any liability on the part of the Authority or any officer or employee thereof for any flood damages that result from reliance on this Section or any administrative decision lawfully made hereunder.

**1105 (i) Permit application requirements.**

- (1) No owner or developer shall perform any land development activities on a site where an area of special flood hazard is located, without first meeting the requirements of this Section prior to commencing the proposed activity.
- (2) Unless specifically excluded by this Section, any owner or developer desiring a permit for a land development activity shall submit a permit application to the Authority on a form provided by the Authority for that purpose.
- (3) No permit will be approved for any land development activities that do not meet the requirements, restrictions, and criteria of this Section.

**1105 (j) Floodplain management plan requirements.**

- (1) No application for a development project within any area of special flood hazard established in Section 1105(e) will be approved unless it includes a floodplain management/flood damage prevention plan. This plan shall be in accordance with the criteria established in this Section.
- (2) The floodplain management/flood damage prevention plan must be submitted with the stamp and signature of a Professional Engineer (PE) licensed in the state of Georgia, who will verify that all designs are consistent with the requirements of this Section.
- (3) The approved floodplain management/flood damage prevention plan shall contain certification by the applicant that all land development activities will be done according to the plan or previously approved revisions. Any and all land development permits and/or use and occupancy certificates or permits may be revoked and water service may be terminated by the Authority at

any time if the construction and building activities are not in strict accordance with approved plans.

- (4) The floodplain management/flood damage prevention plan shall include, but not be limited to, the following: plans drawn to scale of the site in question and the nature, location, and dimensions of existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage and stormwater management facilities. Specifically, the following information is required:
- a. Site plan, including but not limited to:
    1. For all proposed structures in the base floodplain or future-conditions floodplain, spot ground elevations at building corners and twenty-foot (20-foot) or smaller intervals along the foundation footprint, or one foot contour elevations throughout the building site;
    2. Proposed placement of earthen fill, amount and location of excavations, and storage of materials and equipment;
    3. Proposed locations of water supply, sanitary sewer and utilities;
    4. Proposed locations of drainage and stormwater management facilities;
    5. Proposed grading plan;
    6. Base flood elevations or future-conditions flood elevations;
    7. Boundaries of the base flood floodplain or future-conditions flood floodplain;
    8. If applicable, the location of the floodway; and,
    9. Certification of the above by a registered professional engineer or surveyor.
  - b. Building and foundation design detail, including but not limited to:
    1. Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
    2. Elevation in relation to mean sea level to which any non-residential structure will be floodproofed;
    3. Certification that any proposed non-residential floodproofed structure meets the criteria in Section 1105(s)(2);
    4. For enclosures below the base flood elevation, location and total net area of foundation openings as required in Article 11, Section 1105(s)(6) of the Unified Development Code; and,
    5. Design plans certified by a registered professional engineer or architect for all proposed structures.
  - c. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed land development project;
  - d. All appropriate certifications required under this Section;
  - e. Hard copies and digital files of computer models, if any, copies of work maps, comparison of pre- and post-development condition base flood elevations, future-conditions flood elevations, flood protection elevations, areas of special flood hazard and regulatory floodway widths, flood profiles and all other computations and other relevant information; and
  - f. Copies of all applicable State and Federal permits necessary for the proposed development.

**1105 (k) Construction stage submittal requirements.**

- (1) For all new construction and substantial improvements on sites with a floodplain management/flood damage prevention plan, the permit holder shall provide the County Floodplain Administrator a certified as-built Elevation Certificate or Floodproofing Certificate for non-residential construction, including the lowest floor elevation or flood-proofing level, immediately after the lowest floor or flood-proofing is completed. A Final Elevation Certificate shall be provided after completion of construction, including final grading of the site. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood-proofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
- (2) Any work undertaken prior to approval of these certifications shall be at the permit holder's risk. The County Floodplain Administrator shall review the above-referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being allowed to proceed. Failure to submit certificates or failure to make the corrections required hereby shall be cause to issue a stop-work order for the project and/or withhold the Certificate of Occupancy.

**1105 (l) Duties and responsibilities of the authority.**

Duties of the Authority shall include, but shall not be limited to:

- (1) Review of all land development applications and permits to assure that the requirements of this Section have been satisfied and to determine whether proposed building sites will be reasonably safe from flooding;
- (2) Require that copies of all necessary permits from governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1334, be provided and maintained on file;
- (3) When Base Flood Elevation data or floodway data have not been provided, then the Authority shall require the applicant to obtain, review, and reasonably utilize any base flood elevation and floodway data available from federal, state, or other sources in order to meet the provisions of this Section;
- (4) Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new or substantially improved structures;
- (5) Record the actual elevation, in relation to mean sea level, to which any new and substantially improved structures have been flood-proofed;
- (6) When flood-proofing is utilized for a non-residential structure, the Authority shall obtain certification of design criteria from a registered professional engineer or architect;
- (7) Notify affected adjacent communities and the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA);
- (8) Where interpretation is needed as to the exact location of boundaries of the Areas of Special Flood Hazard (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions), the Authority shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Section. Where floodplain elevations have been defined, the floodplain shall be determined based on flood elevations rather than the area graphically delineated on the floodplain maps; and,
- (9) All records pertaining to the provisions of this Section shall be maintained in the office of the Authority and shall be open for public inspection.

**1105 (m) Definition of floodplain boundaries.**

- (1) Studied "A" zones, as identified in the FIS, shall be used to establish base flood elevations whenever available.
- (2) For all streams with a drainage area of one hundred (100) acres or greater, the future-conditions flood elevations shall be provided by the Authority. If future-conditions elevation data is not available from the Authority, then it shall be determined by a professional engineer using methods approved by FEMA and the Authority, the cost of which shall be paid by the applicant.

**1105 (n) Definition of floodway boundaries.**

The width of a floodway shall be determined from the FIS or FEMA approved flood study. For all streams with a drainage are of one hundred (100) acres or greater, the regulatory floodway shall be provided by the Authority. If floodway data is not available from the Authority, then it shall be determined by a professional engineer using methods approved by FEMA and the Authority, the cost of which shall be paid by the applicant.

**1105 (o) General standards for land development.**

- (1) No development shall be allowed with the future-conditions floodplain that could result in any of the following:
  - a. Raising the base flood elevation or future-conditions flood elevation equal to more than 0.01 foot;
  - b. Reducing the regulatory flood storage capacity - All compensation for storage capacity shall occur between the average ground water table elevation or future-conditions flood elevation and lie either within the boundaries of ownership of the property being developed, and shall be within the immediate vicinity of the location of the encroachment. Acceptable means of providing required compensation include: lowering of natural ground elevations within the floodplain; or lowering of adjoining land areas to create additional floodplain storage. All cut areas are to be graded to a slope of no less than three percent ( 3.0 %). In no case shall any required compensation be provided via bottom storage or by excavating below the elevation of the top of the natural (pre-development) stream channel unless such excavation results from the widening or relocation of the stream channel. A step-backwater analysis will be required to determine the volume of flood storage created by raising the regulatory flood elevation;
  - c. Changing the flow characteristics as to the depth and velocity of the waters of the base flood or future-conditions flood as they pass both the upstream and the downstream boundaries of the property. Verification shall be provided via a step-backwater analysis; or
  - d. Creating hazardous or erosion-producing velocities, or resulting in excessive sedimentation. In all cases, effective transitions must be provided such that flow velocities occurring on both upstream and downstream properties are not increased or decreased.
- (2) All proposed public utilities and facilities, such as sewer, gas, electrical, and water system, shall be located and constructed to minimize flood damage.
- (3) Any significant physical changes to the regulatory floodplain or any significant changes or revisions to the flood data adopted herein and shown on the FIRM shall be submitted as a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Amendment (CLOMA), whichever is applicable. The CLOMR submittal shall be subject to approval by the Authority and the County using the Community Consent forms before forwarding the submittal package to FEMA for final approval. The responsibility for forwarding the CLOMR to FEMA and for obtaining the CLOMR approval shall be the responsibility of the applicant. Within six (6) months of the completion of construction, the applicant shall submit as-built surveys that demonstrate general conformance to the approved designs as submitted in the CLOMR application. A Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) must be issued before the Final Plat can be approved or a Certificate of Occupancy can be issued. Significant changes or revisions shall be defined as any change to the FIRM easily observed

when plotted at a scale of one (1) inch equals one thousand (1,000) feet. The changes or revisions may be due to, but are not limited to, more current and/or superior topographic information or compensatory cut and fill grading done as a part of the development.

**1105 (p) Engineering study requirements for floodplain encroachments.**

An engineering study is required, as appropriate to the proposed development activities on the site, whenever a development proposes to disturb the base floodplain or future-conditions floodplain. This study shall be prepared by a currently registered Professional Engineer in the State of Georgia and made a part of the application for a permit. This information shall be submitted to and approved by the Authority prior to the approval of any permit that would authorize the disturbance of land located within the floodplain. Such study shall include:

- (1) Description of the extent to which any watercourse or floodplain will be altered or relocated as a result of the proposed development;
- (2) Step-backwater analysis, using a FEMA approved methodology approved by the Authority. Cross-sections (which may be supplemented by the applicant) and flow information will be obtained whenever available. Computations will be shown duplicating FIS results and will then be rerun with the proposed modifications to determine the new base flood and regulatory flood profiles;
- (3) Floodplain storage calculations based on cross-sections (at least one (1) every one hundred (100) feet) showing existing and proposed floodplain conditions to show that regulatory floodplain storage capacity would not be diminished by the development;
- (4) If changes to the regulatory flood elevation are proposed, profiles of the channel showing the existing and proposed regulatory flood elevations must be provided; and,
- (5) The study shall include a preliminary plat, grading plan, or site plan, as appropriate, which shall clearly define all floodplain encroachments.

**1105 (q) Floodway encroachments.**

Located within Areas of Special Flood Hazard are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris, or erosion potential. In addition, floodways must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

- (1) Encroachments are prohibited, including earthen fill, new construction, substantial improvements, or other development within the regulatory floodway, except when required for the construction of bridges, culverts, roadways, and utilities, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in any increase to the pre-project base flood elevations, floodway elevations, or floodway widths during the regulatory or base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof; and,
- (2) If the applicant proposes to revise the floodway boundaries, no permit authorizing the encroachment into or an alteration of the floodway shall be issued by the Authority until an affirmative Conditional Letter of Map Revision (CLOMR) is issued by FEMA and a no-rise certificate is approved by the Authority.

**1105 (r) Maintenance requirements.**

The property owner shall be responsible for continuing maintenance as may be needed within an altered or relocated portion of a floodplain on his property so that the flood-carrying or flood storage capacity is not diminished. The Authority may direct the property owner (at no cost to the Authority) to restore the flood-carrying or flood storage capacity of the floodplain if the owner has not performed maintenance as required by the approved floodplain management plan on file with the Authority.

### **1105 (s) General standards for flood hazard reduction.**

In all Areas of Special Flood Hazard, the following provisions apply:

- (1) New construction of residential buildings, including manufactured homes, shall not be allowed within the limits of the future-conditions floodplain;
- (2) New construction of non-residential structures shall not be allowed within the future-conditions floodplain unless all requirements of Article 11, Section 1105(j), (k), (o), (p) and (q) are met;
- (3) New construction or substantial improvements of existing structures shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
- (4) New construction or substantial improvement of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- (5) New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
- (6) Enclosures.

All substantial improvements of existing structures that include any fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished and flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.

- a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
    1. Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
    2. The bottom of all openings shall be no higher than one (1) foot above grade; and,
    3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwater in both directions.
  - b. So as not to violate the "Lowest Floor" criteria of this Section, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and,
  - c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
- (7) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located three (3) feet above the base flood elevation or one (1) foot above the future-conditions flood elevation, whichever is higher, so as to prevent water from entering or accumulating within the components during conditions of flooding;
  - (8) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces;
  - (9) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
  - (10) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;

- (11) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and,
- (12) Any alteration, repair, reconstruction, or improvement to a structure that is not compliant with the provisions of this Section, shall be undertaken only if the nonconformity is not furthered, extended, or replaced.
- (13) If the proposed development has multiple flood zones or multiple base flood elevations, the higher or more restrictive base flood elevation or future-conditions elevation and development standards shall take precedence.

**1105 (t) Building standards for structures and buildings within the floodplain.** *(Amended 8-1-2017 - TXT-2017-04, § 10)*

(1) Residential buildings.

a. New construction.

New construction of residential buildings, including manufactured homes, shall not be allowed within the limits of the base floodplain or future-condition floodplain.

b. Substantial improvements.

Substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than three (3) feet above the base flood elevation or one (1) foot above the future-conditions flood elevation, whichever is highest. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to equalize the hydrologic flood forces on exterior walls and to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Section 1105(s)(6) "Enclosures." *(Amended 02/2005)*

(2) Nonresidential buildings.

a. New construction.

New construction of principal buildings shall not be allowed within the limits of the future-conditions floodplain unless all requirements of Article 11, Section 1105(j), (k), (o), (p) and (q) have been met. New construction that has met these requirements may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one (1) foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is higher, with walls substantially impermeable to the passage of water and structural components having the capacity of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the designs and methods of construction are in accordance with accepted standards of practice for meeting the provisions above and shall provide such certifications to the Authority.

b. Substantial improvements.

Substantial improvement of any principal non-residential structure located in A1-30, AE, or AH zones may be authorized by the Authority to be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to one (1) foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is highest, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered Professional Engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the Authority.

(3) Accessory structures and facilities.

Accessory structures and facilities (i.e., barns, sheds, gazebos, detached garages, parking lots, recreational facilities, and other similar structures and facilities) which are permitted to be located within the limits of the floodplain shall be constructed of flood-resistant materials and designed and constructed to pass all floodwater in a manner consistent with Section 1105 (s) (6) and be anchored to prevent flotation, collapse or lateral movement of the structure.

(4) Standards for recreational vehicles.

All recreational vehicles placed on sites must either:

- a. Be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additional); or
- b. The recreational vehicle must meet all the requirements for "Residential Buildings - Substantial Improvements," including the anchoring and elevation requirements above.

(5) Standards for manufactured homes.

- a. New construction or development that involves the placed of manufactured homes within the limits of the base floodplain or future-conditions floodplain shall not be allowed.
- b. Manufactured homes placed and/or substantially improved within an existing manufactured home park or subdivision shall be floodproofed as follows:
  1. The manufactured home shall be elevated such that the lowest floor is elevated no lower than three (3) feet above the base flood elevation or one (1) foot above the future-conditions floodplain, whichever is higher; and
  2. The manufactured home must be securely anchored to an adequate foundation system to resist foundation collapse and lateral movement in accordance with Article 11, section 1105(s)(8).
  3. The manufactured home chassis must be elevated no less than thirty-six (36) inches in height above grade and supported by reinforced piers.

**1105 (u) Building standards for structures and buildings authorized adjacent to the floodplain.**

All buildings shall comply with the County's building codes, in addition to the following:

(1) Residential buildings.

No new residential structures maybe constructed within the base floodplain or the future-conditions floodplain. For new construction adjacent to the base floodplain or future-conditions floodplain or substantial improvement to any existing residential building or manufactured home within a floodplain, the elevation of the lowest floor, including basement and access to the building, shall be at least three (3) feet above the level of the highest base flood (one hundred-year (100-year)) elevation or one (1) foot above the future-conditions flood elevation, whichever is higher.

(2) Nonresidential buildings.

For new construction or substantial improvement of any principal non-residential building, the elevation of the lowest floor, including the basement and access to the building, shall be at least one (1) foot above the level of the base flood (one hundred-year (100-year)) elevation or at least as high as the future-conditions flood elevation, whichever is highest.

**1105 (v) Building standards for streams without established base flood elevations and/or floodway (A-Zones).**

For a residential single-lot development not part of a subdivision that has Areas of Special Flood Hazard, where streams exist but no base flood data have been provided (A-Zones), the Authority shall review and reasonably utilize any available scientific or historic flood elevation data, base flood elevation and floodway data or future-conditions flood elevation data available from a Federal, State, local or other source, in order to administer the provisions and standards of this ordinance.

If data are not available from any of these sources, the following provisions shall apply:

- (1) No encroachments, including structures or fill material, shall be located within an area equal to twice the width of the stream or fifty (50) feet from the top of the bank of the stream, whichever is greater.
- (2) In special flood hazard areas without base flood or future-conditions flood elevations data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with Article 11, Section 1105(s)(6).
- (3) For new homes constructed upstream of and adjacent to a new or existing roadway crossing of a stream where the roadway forms a sag vertical curve, the lowest floor of the lowest enclosed area (including basement) shall be elevated no less than three (3) feet above the top of the roadway or curb, whichever is higher, measured at the low point of the curve.

**1105 (w) Building standards for X Zone areas.**

- (1) Located outside of A Zones and AE Zones, X Zones include the following:
  - a. Areas outside the one hundred-year (100-year) floodplain but within the five hundred-year (500-year) floodplain as determined by a detailed study (spotted X Zones).
  - b. Areas outside the five hundred-year (500-year) floodplain as determined by a detailed study.
  - c. Areas that have not yet been studied.
- (2) The Authority reserves the right to require further studies for any development within an X Zone, if there is evidence that a potential flood hazard exists. Such evidence may include but shall not be limited to:
  - a. Eyewitness reports of historic flooding or other reports of historic flooding deemed credible by the Authority.
  - b. Geologic features observed that resemble floodplains (such as flat areas along streams).
  - c. Proximity to man-made or natural constrictions such as road crossings that can cause backwater effects.
  - d. Drainage basin characteristics such as drainage area, slope, percent impervious cover, land use, etc.
- (3) For new homes constructed adjacent to a new or existing roadway crossing of a stream where the roadway forms a sag vertical curve, the lowest floor of the lowest enclosed area (including basement) shall be elevated no less than three (3) feet above the top of the roadway or curb, whichever is higher, measured at the low point of the curve.

**1105 (x) Building standards for Areas of Shallow Flooding (AO-Zones).**

Areas of Special Flood Hazard may include designated "AO" shallow flood areas. These areas have base flood depths of one to three feet above ground, with no clearly defined channel. In these areas, the following provisions apply:

- (1) All substantial improvements of residential and non-residential structures shall have the lowest floor, including basement, elevated to no lower than one (1) foot above the flood depth number

specified on the Flood Insurance Rate Map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three (3) feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards for "Elevated Buildings."

The applicant's or owner's engineer shall certify to the Authority that the lowest floor elevation level is at least three (3) feet above the highest adjacent grade and the record shall become a permanent part of the permit file.

- (2) Substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus one (1) foot above the highest adjacent grade, with wall substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice; and
- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

**1105 (y) Standards for subdivisions.**

- (1) All subdivision proposals shall identify the special flood hazard area and provide base flood and regulatory flood elevation data.
- (2) All residential lots in a subdivision shall have sufficient buildable area outside of the base floodplain or future-condition floodplain such that encroachments into the floodplain for residential structures will not be required.
- (3) All subdivision plans will provide the elevation of proposed structure(s) and pad(s) in accordance with Section 1105(j).
- (4) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (5) All subdivision proposals shall have public utilities and facilities, such as sanitary sewer, gas, electrical, and water systems located and constructed to minimize or eliminate infiltration of flood waters and discharges from the systems into flood waters.
- (6) All subdivision proposals shall have adequate drainage and stormwater management facilities per the requirements of the Authority and Douglas County to reduce exposure to flood hazards.

**1105 (z) Standards for utilities.**

- (1) All new and replacement water supply and sanitary sewerage systems shall be designed to minimize or eliminate:
  - a. Infiltration of flood waters into the systems; and,
  - b. Discharges from the systems into flood waters.
- (2) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

**1105 (aa) Repetitive loss structures/substantial damage.**

- (1) Repetitive loss structures

The County Floodplain Administrator may declare any structure as a repetitive loss structure as required to qualify the structure for increased cost of compliance benefits allowed in the National Flood Insurance Program. To be declared a repetitive loss structure, the following conditions must be true:

- a. The structure must have a flood insurance policy that includes increased cost of compliance coverage; and,
  - b. The structure must have been flooded at least twice during a ten-year (10-year) period which ends on the date of the second flood with each flood event causing damage for which the repair cost equaled or exceeded twenty-five (25) percent of the market value of the structure; and,
  - c. The cost to repair the flood damage, on average, equaled or exceeded twenty-five (25) percent of the fair market value of the structure at the time of each flood eve, and;
  - d. The owner, or representative, shall request the declaration in writing and provide supporting documentation to show that the above requirements have been met.
- (2) Substantial damage

The County Floodplain Administrator may declare any damaged structure to have "Substantial Damage" as required to qualify the structure for increased cost of compliance benefits allowed in the National Flood Insurance Program. To be declared as having substantial damage, the structure must have qualified damage as follows:

- a. Single event damage of any origin such that the cost of restoring the structure to its pre-damaged condition would equal or exceed fifty (50) percent of the fair market value of the structure at the time it received damage.
- b. Cumulative damage of any origin over a period of time not to exceed 10 year such that the cumulative cost of repairs equals or exceed fifty (50) percent of the current fair market value of the structure.

#### **1105 (bb) Variance procedures.**

The following variance and appeals procedures shall apply to an applicant who has been denied a permit for a development or to an owner or developer who has not applied for a permit because it is clear that the proposed development activity would be inconsistent with the provisions of this Article. A request for a variance may be submitted by an applicant who has been denied a permit by the Authority or by an owner or developer who has not been previously applied for a permit stated above.

- (1) Requests for variances from the requirements of this Article shall be submitted to the Authority. All such requests shall be heard and decided in accordance with procedures established by the Authority. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.
- (2) The Variance Board as established by the Authority shall hear and decide requests for appeals or variance from the requirements of this Section.
- (3) The Variance Board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Engineering Department in the enforcement or administration of this Section.
- (4) Any person aggrieved by the decision of the Variance Board may, after exhausting all administrative remedies, appeal such decision to the Superior Court of Douglas County, as provided by state law.
- (5) Variances may be issued for the repair and rehabilitation of Historic Structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an Historic Structure, and the variance is the minimum to preserve the historic character and design of the structure.
- (6) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria in this Section are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.

- (7) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (8) In reviewing such requests, the Variance Board shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this Section.
- (9) Conditions for floodplain variances.

A floodplain variance shall be issued only when there is:

- a. A finding of good and sufficient cause;
  - b. A determination that failure to grant the variance would result in exceptional hardship; and,
  - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, or cause fraud on or victimization of the public.
- (10) The provisions of this Section are minimum standards for flood loss reduction, therefore any deviation from the standards must be weighed carefully. Floodplain variances shall only be issued upon determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and, in the instance of an Historic Structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
  - (11) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
  - (12) The Authority shall maintain the records of all appeal actions and report any floodplain variances to the Federal Emergency Management Agency upon request.
  - (13) Any person requesting a variance shall, from the time of the request until the time the request is acted upon, submit such information and documentation as the Authority and the Variance Board shall deem necessary to the consideration of the request.
  - (14) Upon consideration of the factors listed above and the purposes of this Section, the Authority and the Variance Board may attach such conditions to the granting of variances as it deems necessary or appropriate, consistent with the purposes of this Section.

#### **1105 (cc) Violations, enforcement, and penalties.**

Any action or inaction which violates the provisions of this Section or the requirements of an approved stormwater management plan or permit may be subject to the enforcement actions outlined in this Section. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

- (1) Notice of Violation.

If the Authority determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management plan or the provisions of this Section, it shall issue a written notice of violation to such applicant or other responsible person. Where a person is engaged in activity covered by this Section without having first secured a permit therefore, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation shall contain:

- a. The name and address of the owner or the applicant or the responsible person;
- b. The address or other description of the site upon which the violation is occurring;

- c. A statement specifying the nature of the violation;
- d. A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the stormwater management plan, or this Section and the date for the completion of such remedial action;
- e. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed; and,
- f. A statement that the determination of violation may be appealed to the Authority by filing a written notice of appeal within 30 days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient).

(2) Penalties.

In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the Authority shall first notify the applicant or other responsible person in writing of its intended action, and shall provide a reasonable opportunity, of not less than 10 days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the Authority may take any one or more of the following actions or impose any one or more of the following penalties:

a. Stop-work order.

The Authority may issue a stop-work order, which shall be served on the applicant or other responsible person. The stop-work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop-work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.

b. Termination of water service and/or request to withhold certificate of occupancy.

The Authority may terminate water service and/or request that the County refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

c. Suspension, revocation, or modification of permit.

The Authority may suspend, revoke, or modify the permit authorizing the land development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the Authority may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

d. Civil penalties.

In the event the applicant or other responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to cure the violations described therein within 10 days, or such greater period as the Authority shall deem appropriate (except, that in the event the violation constitutes an immediate danger to public health or public safety,

24 hours notice shall be sufficient) after the Authority has taken one or more of the actions described above, the Authority may impose a penalty not to exceed \$1,000 (depending upon the severity of the violation) for each day the violation remains unremitted after receipt of the notice of violation.

e. Criminal penalties.

For intentional and flagrant violations of this Section, the Authority may issue a citation to the applicant or other responsible person, requiring such person to appear in the magistrate or other court of competent jurisdiction to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed \$1,000 or imprisonment for 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(3) Administrative appeal; judicial review.

- a. Administrative remedies. Any person receiving a notice of violation may appeal the determination of the Authority, including but not limited to the issuance of a stop work order, the assessment of an administratively-imposed monetary penalty, the suspension, revocation, modification or grant with condition of a permit by the Authority upon finding that the holder is not in compliance with the approved erosion and sediment control plan, or that the holder is in violation of permit conditions, or that the holder is in violation of any applicable ordinance or any of the Authority's Rules and Regulations or Design and Construction Standards, or the issuance of a notice of bond forfeiture. The notice of appeal must be in writing and must be received within thirty (30) days from the date of the notice of violation. A hearing on the appeal shall take place within fifteen (15) days from the date of the receipt of the notice of appeal by the Executive Director. All appeals shall be heard and decided by the Authority's designated Appeal Panel, which shall include the Executive Director, the Chief Financial Officer of the Authority, and Deputy Director of Operations, or their designees. The Appeal Panel shall have the power to affirm, modify or reject the original penalty, including the right to increase or decrease the amount of any monetary penalty and the right to add to or delete remedial actions required for correction of the violation and the compliance with the Authority's Rules and Regulations, Design and Construction Standards, and any other applicable local, state or federal requirements. The decision of the Appeal Panel shall be final.
- b. Judicial review. Any person aggrieved by a decision or order of the Authority, after exhausting his administrative remedies, shall have the right to appeal to the Superior Court of Douglas County by petition for writ of certiorari, which must be filed within thirty (30) days of the final decision of the Appeal Panel.