

AN ORDINANCE TO AMEND THE CITY OF JOHNS CREEK CITY CODE TO REVISE CHAPTER 14 LAND DEVELOPMENT AND ENVIRONMENTAL PROTECTION, ARTICLE 3 FLOODPLAIN MANAGEMENT/FLOOD DAMAGE PREVENTION ORDINANCE, TO INCLUDE APPLICABLE REGULATIONS FROM THE CITY ZONING ORDINANCE AND TO BRING THE FLOODPLAIN ORDINANCE IN COMPLIANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM REQUIREMENTS.

WHEREAS, it is necessary to amend this ordinance for compliance with the National Flood Insurance Program requirements; and

WHEREAS, it is necessary to amend this ordinance for compliance with the Metropolitan North Georgia Water Planning District; and

WHEREAS, adoption of this ordinance amendment will allow for clarification in interpretation and enforcement of floodplain management regulations; now

THEREFORE, the City of Johns Creek will amend the Floodplain Management /Flood Damage Prevention Ordinance according to the following changes:

Article 3: Floodplain Management/Flood Damage Prevention Ordinance.

Section 1: General Provisions.

(a) Purpose and Intent

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. Therefore, City of Johns Creek, 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.

The purpose of this ordinance 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, streambank and stream corridor protection, wetlands preservation and ecological and environmental protection by provisions designed to:

- (i) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - (ii) 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;
 - (iii) Control filling, grading, dredging and other development which may increase flood damage or erosion;
 - (iv) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands;
 - (v) Limit the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; and,
 - (vi) Protect the stormwater management, water quality, streambank protection, stream corridor protection, wetland preservation and ecological functions of natural floodplain areas.
- (b) Applicability

This ordinance shall be applicable to all Areas of Special Flood Hazard within the City of Johns Creek, Georgia.

- (c) Designation of Ordinance Administrator

The Director or his/her designee is hereby appointed to administer and implement the provisions of this ordinance.

- (d) Basis for Area of Special Flood Hazard—Flood Area Maps and Studies

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

- (i) The Flood Insurance Study (FIS) for Fulton County, dated May 7, 2001, with accompanying maps and other supporting data and any revision thereto.
- (ii) Other studies which may be relied upon for the establishment of the base flood elevation or delineation of the 100-year floodplain include:
 - (A) Any flood or flood-related study conducted by the United States Corps of Engineers, the United States Geological Survey, or any other local, state or Federal Agency applicable to the City of Johns Creek; or

- (B) Any base flood study authored by a registered Professional Engineer in the State of Georgia which has been prepared by FEMA approved methodology and approved by the Director.
- (C) Base flood elevation data are required for all proposed subdivision and other developments greater than or equal to 50 lots or 5 acres within or adjacent to *A-Zones*
- (iii) Other studies which may be relied upon for the establishment of the future-conditions flood elevation or delineation of the future-conditions floodplain and flood prone areas include:
 - (A) Any flood or flood-related study conducted by the United States Corps of Engineers , the United States Geological Survey, or any other local, state, or Federal Agency applicable to the City of Johns Creek; or
 - (B) Any future-conditions flood study authored by a registered Professional Engineer in the State of Georgia which has been approved by FEMA approved methodology approved by the Director.
- (iv) The repository for public inspection of the FIS, accompanying maps accompanying maps and other supporting data is located at Johns Creek City Hall.
- (e) Compatibility with Other Regulations

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation, statute, easement, covenant, deed restriction or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or impose higher protective standards for human health or the environment shall control.
- (f) 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.
- (g) Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by manmade or natural causes. This ordinance 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 ordinance shall not create liability on the part of the City of Johns Creek or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made there under.

Section 2: Definitions.

For the purpose of this Article, the following definitions apply.

- (a) *“Addition (to an existing building)”* means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by an independent perimeter load-bearing wall shall be considered New Construction.
- (b) *“Appeal”* means a request for a review of the Director’s interpretation of any provision of this ordinance.
- (c) *“Area of Shallow Flooding”* means a designated AO or AH Zone on a community’s 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.
- (d) *“Area of Special Flood Hazard”* is the land subject to a one percent or greater chance of flooding in any given year. 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), all floodplain and flood prone areas at or below the future-conditions flood elevation, and all other flood prone areas as referenced in Section 1(d). All streams with a drainage area of 100 acres or greater shall have the area of special flood hazard delineated.
- (e) *“Base Flood”* means the flood having a one percent chance of being equaled or exceeded in any given year [i.e., the “100-year flood”].
- (f) *“Base Flood Elevation”* means the highest water surface elevation anticipated at any given point during the base flood.

- (g) “*Basement*” a level below a floor of a building with a portion of the floor below grade.
- (h) “*Building*” means any structure built for support, shelter, or enclosure for any occupancy or storage.
- (i) “*Development*” means 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, and any other installation of impervious cover, excavation or drilling operations or storage of equipment or materials,
- (j) “*Director*” means Director of City of Johns Creek Community Development Department.
- (k) “*Elevated Building*” means 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.
- (l) “*Existing Construction*” Any structure for which the “start of construction” commenced before January 1, 1975.
- (m) “*Existing Manufactured Home Park or Subdivision*” means 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 December 19, 2006.
- (n) “*Expansion to an Existing Manufactured Home Park or Subdivision*” means 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.
- (o) “*FEMA*” means the Federal Emergency Management Agency.
- (p) “*Flood*” or “*Flooding*” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (i) the overflow of inland or tidal waters; or
- (ii) the unusual and rapid accumulation or runoff of surface waters from any source.
- (q) “*Flood Hazard Boundary Map*” or “*FHBM*” means an official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been defined as Zone A.
- (r) “*Flood Insurance Rate Map*”, or “*FIRM*”, means 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.
- (s) “*Flood Insurance Study*” or “*FIS*” means the official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.
- (t) “*Floodplain*” means any land area susceptible to flooding.
- (u) “*Floodproofing*” means 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.
- (v) “*Floodway*” or “*Regulatory Floodway*” means 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.
- (w) “*Functionally Dependent Use*” means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water.
- (x) “*Future-Conditions Flood*” means the flood having a one percent chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.
- (y) “*Future-conditions Flood Elevation*” means the flood standard equal to or higher than the Base Flood Elevation. The Future-conditions Flood Elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

- (z) *"Future-conditions Floodplain"* means any land area susceptible to flooding by the future-conditions flood.
- (aa) *"Future-conditions Hydrology"* means the flood discharges associated with projected land-use conditions based on a community's zoning map, comprehensive land-use plans, and/or watershed study projections, and without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill, and excavation.
- (bb) *"Highest Adjacent Grade"* means the highest natural elevation of the ground surface, prior to construction, adjacent to the proposed foundation of a building.
- (cc) *"Historic Structure"* means any structure that is;
 - (i) 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;
 - (ii) 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;
 - (iii) 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
 - (iv) 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.
- (dd) *"Lowest Floor"* means 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 ordinance.

- (ee) “*Manufactured Home*” means 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 manufacture. The term also includes parked trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.
- (ff) “*Mean Sea Level*” means 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 ordinance the term is synonymous with National Geodetic Vertical Datum (NGVD) and/or the North American Vertical Datum (NAVD) of 1988.
- (gg) “*National Geodetic Vertical Datum (NGVD)*” as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.
- (hh) “*New Construction*” means, for the purposes of determining insurance rates, structures for which the “start of construction” commenced after January 1, 1975 and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced after December 19, 2006 and includes any subsequent improvements to such structures.
- (ii) “*New Manufactured Home Park or Subdivision*” means 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 either final site grading or the pouring of concrete pads) is completed on or after December 19, 2006.
- (jj) “*North American Vertical Datum (NAVD) of 1988*” is a vertical control used as a reference for establishing varying elevations within the floodplain.
- (kk) “*Owner*” means 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.
- (ll) “*Permit*” means the permit issued by the City of Johns Creek Community Development Department to the applicant which is required for undertaking any land development activity.

- (mm) “*Recreational Vehicle*” means a vehicle which is:
- (i) built on a single chassis;
 - (ii) 400 square feet or less when measured at the largest horizontal projection;
 - (iii) designed to be self-propelled or permanently towable by light duty truck; and,
 - (iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- (nn) “*Site*” means the parcel of land being developed, or the portion thereof on which the land development project is located.
- (oo) “*Start of Construction*” means the date the permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of the structure such as the pouring of slabs or footings, installation of piles, 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, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main structure. (NOTE: accessory structures are not exempt from any ordinance requirements). 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.
- (pp) “*Structure*” means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank.
- (qq) “*Subdivision*” means 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 divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

- (rr) “*Substantial Damage*” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- (ss) “*Substantial Improvement*” means any combination of repairs, reconstruction, alteration, or improvements to a building, taking place during a 10-year period, in which the cumulative cost equals or exceeds 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 which 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 Code Enforcement Official, and not solely triggered by an improvement or repair project.
- (tt) “*Substantially Improved Existing Manufactured Home Park or Subdivision*” is a condition in which the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.
- (uu) “*Variance*” is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance.
- (vv) “*Violation*” means the failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without the elevation certificate, other certificates, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Section 3: Permit Procedures and Requirements.

(a) Permit Application Requirements

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 ordinance prior to commencing the proposed activity.

Unless specifically excluded by this ordinance, any owner or developer desiring a permit for a land development activity shall submit to the City of Johns Creek a permit application on a form provided by the City of Johns Creek for that purpose.

No land development permit will be approved for any land development activities that do not meet the requirements, restrictions and criteria of this ordinance.

(b) Floodplain Management Plan Requirements

An application for a development project with any Area of Special Flood Hazard located on the site will be required to include a floodplain management / flood damage prevention plan. This plan shall include the following items:

- (i) Site plan drawn to scale, which includes but is not limited to:
 - (A) Existing and proposed elevations of the area in question and the nature, location and dimensions of existing and/or proposed structures, earthen fill placement, amount and location of excavation material, and storage of materials or equipment;
 - (B) For all proposed structures, spot ground elevations at building corners and 20-foot or smaller intervals along the foundation footprint, or one foot contour elevations throughout the building site;
 - (C) Proposed locations of water supply, sanitary sewer, and utilities;
 - (D) Proposed locations of drainage and stormwater management facilities;
 - (E) Proposed grading plan;
 - (F) Base flood elevations and future-conditions flood elevations;
 - (G) Boundaries of the base flood floodplain and future-conditions floodplain;
 - (H) If applicable, the location of the floodway; and
 - (I) Certification of the above by a registered Professional Engineer or surveyor.
- (ii) Building and foundation design detail, including but not limited to:
 - (A) Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
 - (B) Elevation in relation to mean sea level to which any non-residential structure will be floodproofed;

- (C) Certification that any proposed non-residential floodproofed structure meets the criteria in Section 5(b)(ii);
 - (D) For enclosures below the base flood elevation, location and total net area of foundation openings as required in Section 5(a)(v).
 - (E) Design plans certified by a registered Professional Engineer or architect for all proposed structure(s).
- (iii) Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development;
 - (iv) Hard copies and digital files of computer models, if any, copies of work maps, comparison of pre-and post development conditions base flood elevations, future-conditions flood elevations, flood protection elevations, Special Flood Hazard Areas and regulatory floodway widths, flood profiles and all other computations and other information similar to that presented in the FIS;
 - (v) Copies of all applicable State and Federal permits necessary for proposed development; and
 - (vi) All appropriate certifications required under this ordinance. The approved floodplain management / flood damage prevention plan shall contain certification by the applicant that all development activities will be done according to the plan or previously approved revisions. Any and all development permits and/or use and occupancy certificates or permits may be revoked at any time if the construction and development activities are not in strict accordance with approved plans.
- (c) Construction Stage Submittal Requirements

For all new construction and substantial improvements on sites with a floodplain management/flood damage prevention plan, the permit holder shall provide to the Director 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 and certified by same.

Any work undertaken prior to approval of these certifications shall be at the permit holder's risk. The Director 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 certification or failure to make the corrections required hereby shall be cause to issue a stop work order for the project.

(d) Duties and Responsibilities of the Administrator

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

- (i) Review all land development applications and permits to assure that the requirements of this ordinance have been satisfied/and to determine whether proposed building sites will be reasonably safe from flooding;
- (ii) 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;
- (iii) When Base Flood Elevation data or floodway data have not been provided, then the Director shall require the applicant to obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, state or other sources in order to meet the provisions of Sections 4 and 5;
- (iv) 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;
- (v) Review and record the actual elevation, in relation to mean sea level to which any substantially improved structures have been flood-proofed;
- (vi) When flood-proofing is utilized for a structure, the Director shall obtain certification of design criteria from a registered Professional Engineer;
- (vii) 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);
- (viii) 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 Director 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 ordinance. 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,
- (ix) All records pertaining to the provisions of this ordinance shall be maintained in the office of the Director, and shall be open for public inspection.

Section 4: Standards for Development.

(a) Definition of Floodplain Boundaries

- (i) Studied "A" zones, as identified in the FIS, shall be used to establish base flood elevations whenever available.
- (ii) For all streams with a drainage area of 100 acres or greater, the future-conditions flood elevations shall be provided by the City of Johns Creek. If future-conditions elevation data is not available from the City of Johns Creek, then it shall be determined by a registered Professional Engineer using a method approved by FEMA and the City of Johns Creek.

(b) Definition of Floodway Boundaries

- (i) The width of a floodway shall be determined from the FIS or FEMA approved flood study. For all streams with a drainage area of 100 acres or greater, the regulatory floodway shall be provided by the City of Johns Creek. If floodway data is not available from the City of Johns Creek, then it shall be determined by a registered Professional Engineer using a method approved by FEMA and the City of Johns Creek.

(c) General Standards

- (i) The following uses are permitted within the 100-year floodplain:
 - (A) Agriculture, including forestry and livestock raising, requiring no structure. Agriculture and forestry access roads are permitted provided they are constructed in conformance with the development regulations.
 - (B) Dams, provided that they are constructed in accordance with the requirement of this ordinance, the United States Department of Agriculture Soil and Conservation Service and when applicable, meet the specifications of the U.S. Army Corps of Engineers and/or the Georgia Department of Natural Resources.
 - (C) Fences having sufficient open area to permit the free flow of water and/or debris.
 - (D) Identification, regulatory and warning signs.
 - (E) Public and private parks and recreational areas including boat ramps and docks and other functionally dependent uses not including temporary or permanent structures, provided; such use is approved by the Department of Community Development and, if applicable, the U.S. Corps of Engineers.
 - (F) Parking

- (G) Utility lines, pipelines, sewers, roads and stream crossings (if no other means of access is available), and similar features, provided they are constructed in such a manner as to permit the free flow of waters.
- (ii) No construction or structures, including grading, filling, cutting or displacement of earth shall be allowed within the regulatory floodplain that could result in any of the following:
 - (A) Raising the base flood elevation or future-conditions flood elevation equal to or more than 0.01 foot.
 - (B) Reducing the base flood or future-conditions regulatory flood storage capacity.
 - (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 or,
 - (D) Creating hazardous or erosion-producing velocities, or resulting in excessive sedimentation.
- (iii) Any development within the future-conditions floodplain allowed under (ii) above shall also meet the following conditions:
 - (A) Compensation for storage capacity shall occur between the average ground water table elevation and the base flood elevation for the base flood, and between the average ground water table elevation and the future-condition flood elevation for the future-conditions flood, and lie 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. 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;
 - (B) Cut areas shall be stabilized and graded to a slope of no less than 2.0 percent;

- (C) Effective transitions shall be provided such that flow velocities occurring on both upstream and downstream properties are not increased or decreased;
- (D) Verification of no-rise conditions (0.01 foot or less), flood storage volumes, and flow characteristics shall be provided via a step-backwater analysis meeting the requirements of Section 4(d);
- (E) Public utilities and facilities, such as water, sanitary sewer, gas, and electrical systems, shall be located and constructed to minimize or eliminate infiltration or contamination from flood waters;
- (F) For residential lots, not less than 70% of the buildable land area must lie above the base flood elevation, a minimum of three (3) feet, and/or not less than 50% of the minimum lot area must lie above the base flood elevation.
- (G) Any significant physical changes to the base flood floodplain 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 City. The responsibility for forwarding the CLOMR to FEMA and for obtaining the CLOMR approval shall be the responsibility of the applicant. Within six months of the completion of construction, the applicant shall submit as-built surveys for a final Letter of Map Revision (LOMR). 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 or Completion can be issued.

(d) 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 any land within the future-conditions floodplain, except for a residential single-lot development on streams without established base flood elevations and/or floodways for which the provisions of Section 5 (d) apply. 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 City of Johns Creek Community Development Department prior to the approval of any permit which would authorize the disturbance of land located within the future-conditions floodplain. Such study shall include:

- (i) Description of the extent to which any watercourse or floodplain will be altered or relocated as a result of the proposed development;

- (ii) Step-backwater analysis, using a method approved by the City of Johns Creek Community Development Department. 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 profiles and future-conditions flood profiles;
- (iii) Floodplain storage calculations based on cross-sections (at least one every 100 feet) showing existing and proposed floodplain conditions to show that base flood floodplain and future-conditions floodplain storage capacity would not be diminished by the development;
- (iv) The study shall include a preliminary plat, grading plan, or site plan, as appropriate, which shall clearly define all future-conditions floodplain encroachments.

(e) 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 flood waters, 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:

- (i) 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 base flood discharge. A registered Professional Engineer must provide supporting technical data and certification thereof; and,
- (ii) 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 City of Johns Creek until an affirmative Conditional Letter of Map Revision (CLOMR) is issued by FEMA and no-rise certification is approved by the City of Johns Creek Community Development Department

(f) 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 City of

Johns Creek may direct the property owner (at no cost to the City of Johns Creek) 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 City of Johns Creek Community Development Department.

Section 5: Provisions for Flood Damage Reduction.

(a) General Standards

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

- (i) New construction of principal buildings (residential or non-residential), including manufactured homes, shall not be allowed within the limits of the future-conditions floodplain.
- (ii) New construction or substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (iii) New construction or substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- (iv) New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
- (v) Elevated Buildings. All new construction and 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 be certified to comply by a Professional Engineer and meet the following minimum criteria:
 - (1) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (2) The bottom of all openings shall be no higher than one 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 ordinance, 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.
 - (vi) 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;
 - (vii) Manufactured homes shall be anchored to prevent flotation, collapse, or 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;
 - (viii) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - (ix) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
 - (x) Onsite waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and,
 - (xi) Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this ordinance, shall be undertaken only if the non- conformity is not furthered, extended or replaced.
 - (xii) If the proposed development is located in multiple flood zones or multiple base flood elevations cross the proposed site, the higher or more restrictive base flood elevation or future-condition elevation and development standards shall take precedence.
 - (xiii) All drainage structures and facilities located within Special Flood Hazard or Flood Prone areas shall be constructed according to City of Johns Creek standards and specifications. They shall be maintained by the owner in a sanitary, fully functional and operable state so that the flood carrying capacity of the watercourse is preserved.
- (b) Building Standards for Structures and Buildings within the Future-Conditions Floodplain
- (i) Residential Buildings
 - (A) New construction. New construction of principal buildings, including manufactured homes shall not be allowed within the limits of the future-conditions floodplain unless all requirements of

Sections 4(c), 4(d) and 4(e) have been met. If all of the requirements of Sections 4(c), 4(d) and 4(e) have been met, all new construction 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 higher. Should solid foundation perimeter walls be used to elevate the 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 5(a)(v).

- (B) Substantial Improvements. Substantial improvement of any principal structure or manufactured home shall have the lowest floor, including basement, elevated no lower than three (3) feet above the base flood elevation adjacent to the building or at least as high as 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 facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 5 (a)(v).

(ii) Non-Residential Buildings

- (A) New construction. New construction of principal buildings, including manufactured homes shall not be allowed within the limits of the future-conditions floodplain unless all requirements of Sections 4(c), 4(d) and 4(e) have been met. New construction that has met all of the requirements of Sections 4(c), 4(d) and 4(e) may be flood-proofed 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 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 Director.
- (B) Substantial Improvements. Substantial improvement of any principal non- residential structure located in A1- 30, AE, or AH zones, may be authorized by the Director 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 Director.

(iii) Accessory Structures and Facilities

Accessory structures and facilities (i.e., barns, sheds, gazebos, detached garages, parking lots, pools, 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 to pass all floodwater in accordance with Section 5(a)(v) and anchored to prevent flotation, collapse, or lateral movement of the structure.

(iv) 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 additions); or
- (B) The recreational vehicle must meet all the requirements for "Residential Buildings—Substantial Improvements", including the anchoring and elevation requirements above.

(v) Standards for Manufactured Homes

- (A) New manufactured homes shall not be allowed to be placed within the limits of the future-conditions floodplain.
- (B) Manufactured homes placed and/or substantially improved in an existing manufactured home park or subdivision shall be elevated so that either:
 - (1) The lowest floor of the manufactured home is elevated no lower than three (3) feet above the level of the base flood elevation, or one (1) foot above the future-conditions flood elevation, whichever is higher; or
 - (2) The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.

- (c) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement in accordance with standards of Section 5.(a)(vii).
- (c) Building Standards for Structures and Buildings Authorized Adjacent to the Future-Conditions Floodplain
- (i) *Residential Buildings.* For new construction or substantial improvement of any principal residential building or manufactured home, 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 (100 year) elevation adjacent to the building or, at least one (1) foot above the future-conditions flood elevation, whichever is higher.
- (ii) *Non-Residential Buildings.* For new construction or substantial improvement of any principal non-residential building, 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 elevation adjacent to the building or at least, one (1) foot above the future-conditions flood elevation, whichever is higher.
- (d) Building Standards for Residential Single-Lot Development on 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 Director shall review and reasonably utilize any available scientific or historic flood elevation, data, base flood elevation floodway data or future-conditions flood elevation data available from a Federal, State, or other source, in order to administer the provisions and standards of this Ordinance. If sufficient data are not available from these sources, then the Director may require a hydrologic assessment performed by a registered Professional Engineer to determine the base flood elevation and future-conditions flood elevation. Development for this situation shall comply with Section 5(a-c) of this Article.
- (e) Building Standards for Areas of Shallow Flooding (AO-Zones)
- Areas of Special Flood Hazard may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three feet (1'-3') above ground, with no clearly defined channel. In these areas the following provisions apply:
- (i) 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 flood waters shall be provided in accordance with standards for "Elevated Buildings"

The applicant's or owner's engineer shall certify to the Director the lowest floor elevation level complies and the record shall become a permanent part of the permit file;

- (ii) 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 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; and,
 - (iii) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.
- (f) Standards for Subdivisions
- (i) All subdivision proposals shall identify the special flood hazard area and provide base flood elevation data, and future-conditions flood elevation data.
 - (ii) For All residential lots in a subdivision proposal, not less than 70% of the buildable land area must lie above the base flood elevation, a minimum of three (3) feet, and/or not less than 50% of the minimum lot area must lie above the base flood elevation.
 - (iii) All subdivision plans will provide the elevations of proposed structure(s) in accordance with Section 3(b).
 - (iv) All subdivision proposals shall be consistent with the need to minimize flood damage;
 - (v) All subdivision proposals shall have public utilities and facilities such as 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; and,
 - (vi) All subdivision proposals shall have adequate drainage and stormwater management facilities per the requirements of the City of Johns Creek to reduce potential exposure to flood hazards
 - (vii) No final subdivision plat shall be approved by the City where development has altered the Special Flood Hazard Area unless the City has first received a Letter of Map Change or notice of a Conditional FIRM Revision from FEMA as stipulated in the National Flood Insurance Program Regulations 44 CFR, Part 65.

- (g) Standards for Utilities
 - (i) 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.
 - (ii) Onsite waste disposal systems shall be located outside the floodplain to avoid impairment to them, or contamination from them during flooding.

Section 6: Variance Procedures.

- (a) The City of Johns Creek Board of Zoning Appeals shall hear and decide requests for appeals or variances from the requirements of this ordinance. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.
- (b) The City of Johns Creek Board of Zoning Appeals shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Director in the enforcement or administration of this ordinance. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.
- (c) Any person aggrieved by the decision of the Board of Zoning Appeals may appeal such decision to the Superior Court of Fulton County, as provided in Section 5-4-1 of the Official Code of Georgia Annotated.
- (d) All decisions of the Fulton County Board of Zoning Appeals regarding properties located within the City limits of the City of Johns Creek prior to December 1, 2006 are hereby adopted and incorporated by reference. Such decisions of the Fulton County Board of Zoning Appeals will have the same legal effect as if they were decisions of the City of Johns Creek Board of Zoning Appeals.
- (e) Variances may be issued for the repair or rehabilitation of Historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a Historic structure and the variance issued shall be the minimum necessary to preserve the historic character and design of the structure.
- (f) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article 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.
- (g) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

- (h) In reviewing such requests, the Board of Zoning Appeals shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.
- (i) Conditions for Variances:
 - (i) A 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.
 - (ii) The provisions of this ordinance are minimum standards for flood loss reduction, therefore any deviation from the standards must be weighed carefully. 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 a Historic structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - (iii) 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.
 - (iv) The Director shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- (j) Upon consideration of the factors listed above and the purposes of this ordinance, the Board of Zoning Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

Section 7: Violations, Enforcement, and Penalties.

Any action or inaction which violates the provisions of this ordinance 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 which 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. The imposition of any of the penalties described below shall not prevent such equitable relief.

(a). Notice of Violation

If the City of Johns Creek Community Development Department 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 ordinance, 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 ordinance 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:

- (i) The name and address of the owner or the applicant or the responsible person;
- (ii) The address or other description of the site upon which the violation is occurring;
- (iii) A statement specifying the nature of the violation;
- (iv) A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the stormwater management plan or this ordinance and the date for the completion of such remedial action;
- (v) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed; and,
- (vi) A statement that the determination of violation may be appealed to the City of Johns Creek Community Development Department by filing a written notice of appeal within thirty (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).

(b) 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 City of Johns Creek Community Development Department 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 ten (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 City of Johns Creek Community Development Department may take any one or more of the following actions or impose any one or more of the following penalties.

- (i) *Stop Work Order.* The City of Johns Creek Community Development Department 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.
- (ii) *Withhold Certificate of Occupancy.* The City may 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.
- (iii) *Suspension, Revocation or Modification of Permit.* The City 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 City of Johns Creek Community Development Department may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- (iv) *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 ten (10) days, or such greater period as the City of Johns Creek Community Development Department 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 Department has taken one or more of the actions described above, it may impose a penalty not to exceed \$1,000 per day (depending on the severity of the violation) for each day the violation remains unremedied after receipt of the notice of violation.

- (v) *Criminal Penalties.* For intentional and flagrant violations of this ordinance, the City of Johns Creek Community Development Department may issue a citation to the applicant or other responsible person, requiring such person to appear in magistrate court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed \$1,000 per day 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.

SO ORDAINED, this _____ day of _____, 2009.

Approved:

Michael E. Bodker, Mayor

ATTEST:

Approved as to Form and Content:

Joan Jones, City Clerk
(Seal)

William F. Riley, City Attorney