
**Water Resources
Protection Ordinance
For
Houston County, Georgia**

Adopted November 15, 2005

**Water Resources Protection Ordinance
for
Houston County, Georgia**

ARTICLE I –	INTRODUCTION.....	4
SECTION 1.	GENERAL PROVISIONS	4
ARTICLE II –	DEFINITIONS	6
ARTICLE III –	ILLICIT DISCHARGE PROHIBITION	14
SECTION 1.	GENERAL PROVISIONS	14
SECTION 2.	DISCHARGE PROHIBITIONS.....	14
SECTION 3.	SUSPENSION OF MS4 ACCESS	15
SECTION 4.	MONITORING OF DISCHARGES	16
SECTION 5.	REQUIREMENT TO PREVENT, CONTROL & REDUCE STORMWATER POLLUTANTS	17
SECTION 6.	WATERCOURSE PROTECTION	17
SECTION 7.	NOTIFICATION OF SPILLS	18
SECTION 8.	ENFORCEMENT.....	18
ARTICLE IV –	POST CONSTRUCTION STORMWATER RUNOFF	21
SECTION 1.	GENERAL PROVISIONS	21
SECTION 2.	PERMIT PROCEDURES AND REQUIREMENTS	22
SECTION 3.	WAIVERS TO STORMWATER MANAGEMENT REQUIREMENTS.....	23
SECTION 4.	GENERAL PERFORMANCE CRITERIA FOR STORMWATER MANAGEMENT	25
SECTION 5.	BASIC STORMWATER MANAGEMENT DESIGN CRITERIA	26
SECTION 6.	REQUIREMENTS FOR STORMWATER MANAGEMENT PLAN APPROVAL	28
SECTION 7.	CONSTRUCTION INSPECTION	29
SECTION 8.	MAINTENANCE AND REPAIR OF STORMWATER FACILITIES	30
SECTION 9.	ENFORCEMENT AND PENALTIES	32
ARTICLE V –	FLOOD DAMAGE PREVENTION	34
SECTION 1.	STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE & OBJECTIVES ..	34
SECTION 2.	GENERAL PROVISIONS	35
SECTION 3.	ADMINISTRATION	37
SECTION 4.	PROVISIONS FOR FLOOD HAZARD REDUCTION	42
SECTION 5.	VARIANCE PROCEDURES.....	46
ARTICLE VI –	EROSION AND SEDIMENTATION	49
SECTION 1.	TITLE	49
SECTION 2.	DEFINITIONS	49
SECTION 3.	EXEMPTIONS	53
SECTION 4.	MINIMUM REQUIREMENTS FOR EROSION AND SEDIMENTATION CONTROL USING BEST MANAGEMENT PRACTICES	55
SECTION 5.	APPLICATION/PERMIT PROCESS	59
SECTION 6.	INSPECTION AND ENFORCEMENT	63
SECTION 7.	PENALTIES AND INCENTIVES	64
SECTION 8.	EDUCATION AND CERTIFICATION.....	65

SECTION 9.	ADMINISTRATIVE APPEAL, JUDICIAL REVIEW	66
SECTION 10.	EFFECTIVITY, VALIDITY AND LIABILITY	66
ARTICLE VII.	GROUNDWATER RECHARGE AND MINIMUM LOT SIZE	68
SECTION 1.	MINIMUM LOT SIZING REQUIREMENTS	68
SECTION 2.	CRITERIA FOR PROTECTION OF GROUNDWATER RECHARGE AREAS	70
SECTION 3.	ABOVE GROUND CHEMICAL OR PETROLEUM STORAGE TANKS	71
SECTION 4.	HAZARDOUS MATERIALS HANDLING FACILITIES.....	71
SECTION 5.	STORMWATER INFILTRATION BASINS	72
SECTION 6.	EXEMPTION.....	72
SECTION 7.	EFFECTIVE DATE	72
SECTION 8.	USES SERVED BY A PRIVATE (NON-PUBLIC) WATER SUPPLY SYSTEM	72
SECTION 9.	USES SERVED BY A PUBLIC WATER SUPPLY SYSTEM BY ZONING DISTRICT AND Use	72
SECTION 10.	MULTI-FAMILY RESIDENTIAL DWELLING UNITS	74
ARTICLE VIII.	WATER RESOURCE PROTECTION OVERLAY DISTRICTS.....	76
SECTION 1.	PURPOSE.	76
SECTION 2.	ESTABLISHMENT OF WATER RESOURCE OVERLAY DISTRICTS.....	76
SECTION 3.	DEFINITIONS.	76
SECTION 4.	WETLANDS PROTECTION OVERLAY DISTRICT	78
SECTION 5.	RIVER CORRIDOR PROTECTION OVERLAY DISTRICT.....	80

ARTICLE I – INTRODUCTION

Section 1. General Provisions

1.1. Findings of Fact

It is hereby determined that:

- a. Land development and associated increases in impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition;
- b. This stormwater runoff contributes to increased quantities of water-borne pollutants; and
- c. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from development sites.

Therefore, Houston County establishes this set of water quality and quantity policies applicable to all surface waters to provide reasonable guidance for the regulation of stormwater runoff for the purpose of protecting local water resources from degradation. It is determined that the regulation of stormwater runoff discharges from land development projects and other construction activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will prevent threats to public health and safety.

1.2. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through regulation of activities that can through proper regulation improve and maintain those water resources that lie partially or wholly within the jurisdictional boundaries of Houston County, Georgia.

1.3. Compatibility with Other Permit and Ordinance Requirements

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.4. Severability

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this ordinance.

1.5. Responsibility for Administration

Unless otherwise stated, the Engineering Department shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the Engineering Department may be delegated by the Engineering Department of Houston County to persons or entities acting under the authority of Houston County.

1.6. Effects of Compliance

The standards set forth herein pursuant to this ordinance unless otherwise noted are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no adverse effect with regard to water quality and quantity.

ARTICLE II – DEFINITIONS

When used in this ordinance, the following words and phrases shall have the meaning given in this section. Words not defined herein shall be construed to have a meaning given by common and ordinary use as defined by Webster's Third New International Dictionary, copyright 1970. The term "shall" is mandatory. When not inconsistent with the context, words used in the singular number include the plural and those used in the plural number include the singular. Words used in the present tense include the future. The following definitions shall apply in the interpretation and enforcement of this ordinance, unless otherwise specifically stated:

1. *As-built Drawings*. Amended site and construction plans specifying the locations, dimensions, elevations, capacities and operational capabilities of road and drainage structures and facilities as they have been constructed.
2. *Best Management Practices (BMPs)*. Structural devices to store or treat stormwater runoff or non-structural programs or practices both of which are designed to prevent or reduce the pollution of the waters of the State of Georgia.
3. *Buffer*. An area along the course of any watercourse to be maintained in an undisturbed and natural condition.
4. *Construction*. Any alteration of land for the purpose of achieving its development of changing use, including particularly any preparation for, building of, or erection of a structure and/or infrastructure.
5. *Construction Activity*. Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.
6. *Cut*. A portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to excavated surface. Also known as excavation.
7. *Day*. A day is defined as a calendar day.
8. *Department*. The Georgia Department of Natural Resources.
9. *Design Storm*. The rainfall event of such size and frequency as described in the Georgia Stormwater Management Manual or local design manual, which is used for the design of stormwater facilities.
10. *Developer*. Any person who acts in his own behalf or as the agent of any owner of property and engages in alteration of land or vegetation in preparation for construction activity.
11. *Development*. Any action in preparation for construction activities which result in alteration of either land or vegetation other than such minor land disturbing activities as home gardens and individual home landscaping repairs or maintenance work which result in minor soil erosion.

12. *Director*. The Director of the Environmental Protection Division of the Department of Natural Resources, State of Georgia.
13. *Division*. The Georgia Environmental Protection Division of the Department of Natural Resources, State of Georgia.
14. *Drainage*. A general term applied to the removal of surface or subsurface water from a given area either by gravity or by pumping, commonly applied herein to surface water.
15. *Drainage Plan*. A plan prepared using appropriate and commonly accepted engineering standards which specifies the means for alteration or development of a drainage system.
16. *Drainage Structure*. Any stormwater conveyance structure as defined below, and any piping or ditching for stormwater management purposes.
17. *Drainage System*. The surface and subsurface system for the removal of water from the land, including both the natural elements of streams, marshes, and ponds, whether of an intermittent or continuous nature, and the manmade element which includes culverts, ditches, channels, retention facilities and the storm sewer system.
18. *Erosion*. The process by which land surface is worn away by the action of wind, water, ice or gravity.
19. *Erosion and Sediment Control Plan*. A plan for the control of soil erosion and sediment resulting from land disturbing activity.
20. *Existing Grade*. The vertical location of the existing ground surface prior to cutting or filling.
21. *Filling*. The placement of any soil or other solid material, either organic or inorganic, on a natural ground surface or excavation.
22. *Finished Grade*. The final elevation and contour of the ground after cutting or filling and conforming to the proposed design.
23. *Flood*. A temporary rise in the level of rivers, streams, lakes, marshes and ocean, which results in inundation of areas not ordinarily covered by water.
24. *Floodplain*. Any land area susceptible to being inundated by flood waters from any source.
25. *Floodway*. The channel of a river or other watercourse and the adjacent land areas subject to erosive velocities and damage from flood-borne debris that must be reserved in order to discharge the base flood (Intermediate Regional Flood), without ultimately increasing the water surface elevation more than one foot.
26. *Grading*. Altering ground surfaces to specified elevations, dimensions, and/or slopes; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and shall include the land in its cut or filled condition.
27. *Greenbelt*. An area of land to be dedicated to Houston County or a land trust which shall remain undisturbed, insofar as possible, from its natural state to form a screen or buffer.
28. *Hazardous Materials*. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential

hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

29. *Hotspot*. An area where the land use or activities generate or have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater or as specified by Houston County.
30. *Illicit Discharge*. Any discharge as defined in 40 CFR Part 122.26(b)(2) to a MS4 that is not entirely composed of stormwater, except those discharges authorized under a NPDES permit (other than the NPDES permit for discharges from the MS4).
31. *Illicit Connections*. Any man-made conveyance connecting a discharge directly to a MS4.
32. *Impervious Surface*. A manmade structure or surface which prevents the infiltration of stormwater into the ground below the structure or surface. Structures or surfaces which are constructed so as to only minimally affect the infiltration of stormwater are not considered impervious surfaces.
33. *Industrial Activity*. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).
34. *Intermediate Regional Flood*. A 100-year frequency flood, as defined on the flood hazard map, which has a one-percent chance of being equaled or exceeded in any given year.
35. *Intermittent Stream*. Any stream which flows for only part of the year and does not support aquatic life whose life history requires residence in flowing water for a continuous period of at least six months.
36. *Issuing Authority*. Houston County, which has been certified by the Director of the Environmental Protection Division of the Department of Natural Resources as an issuing authority, pursuant to the Erosion and Sedimentation Act of 1975, as amended.
37. *Jurisdictional Wetland*. An area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers.
38. *Jurisdictional Wetland Determination*. A delineation of jurisdictional wetland boundaries by the U.S. Army Corps of Engineers, as required by section 404 of the Clean Water Act, 33 U.S.C. § 1344, as amended.
39. *Land Disturbing Activity*. Any activity which results in changes in the volume or flow rates of rainfall runoff, soil erosion from water or wind; or the movement of sediments into state waters or onto land within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land.
40. *Live Retention*. That quantity of water capable of being effectively contained by a designated facility for stormwater storage for a specified period of time.
41. *Local Design Manual*. A manual containing specific guidelines and standards for stormwater management that are either watershed or county-wide specific, for the proper implementation of the requirements of this ordinance.
42. *Lot*. A tract, portion or parcel of land separated from other tracts, portions or parcels by description on a subdivision plat of record or survey map or described by metes and bounds, and intended to be used to facilitate transfer of ownership or for building

development. For the purposes of this ordinance, the term does not include any portion of a dedicated right-of-way.

43. *Maintenance of Stormwater Facility*. Preserving the enclosing walls or impounding embankment of the retention facility in good condition; ensuring structural soundness, functional adequacy and freedom from sediment; and rectifying any unforeseen erosion problems.
44. *Municipal Separate Storm Sewer System (MS4)*. A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, owned or operated by a municipality or other public, designed or used for collecting or conveying storm water runoff and is not a combined sewer or part of a Publicly Owned Treatment Works.
45. *National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit*. A permit issued by the U.S. Environmental Protection Agency (or by the state of Georgia under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.
46. *Natural Ground Surface*. The ground surface in its original state before any grading, excavation or filling.
47. *Nephelometric Turbidity Units (NTU)*. Numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloiddally dispersed particles are present.
48. *Non-Stormwater Discharge*. Any discharge to the storm drain system that is not composed entirely of stormwater.
49. *Non-Structural Best Management Practice*. Any natural or planted vegetation or other nonstructural component of the stormwater management plan that provides for or enhances stormwater quantity and/or quality control or other stormwater management benefits, and includes, but is not limited to, riparian buffers, open and greenspace areas, overland flow filtration areas, natural depressions, and vegetated channels.¹
50. *Owner*. The person in whom is vested the fee ownership, dominion or title of property, by proprietor; this term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant, including a developer.
51. *Perennial Stream*. Any stream which flows continuously throughout the year or supports aquatic life whose life history requires residence in flowing water for a continuous period of six months or longer.
52. *Permit*. The authorization necessary to conduct a land-disturbing activity under the provisions of this ordinance.
53. *Person*. Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility,

¹ MNGWPD, Adopted Post Construction Stormwater Runoff Ordinance.

cooperative, state agency, municipality, or other political subdivision of this state, any interstate body or any other legal entity.

54. *Pollution.* The contamination or other significant alteration of any water's physical, chemical or biological properties, including, but not limited to, a change in temperature, taste, color, turbidity, or odor of such waters or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to render such waters harmful, detrimental or injurious to the public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.
55. *Pollutant.* Any impurity or waste material that degrades the physical, chemical, biological or radiological integrity of surface or subsurface waters.
56. *Pretreatment.* The onsite reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in stormwater prior to or in lieu of discharging or otherwise introducing such pollutants into the publicly owned drainage system.
57. *Project.* The entire proposed development project regardless of the size of the area of land to be disturbed.
58. *Reach.* A longitudinal segment of a stream or river measured along specified points on the stream or river.
59. *Redevelopment.* A land development project on a previously developed site, but excludes ordinary maintenance activities, remodeling of existing buildings, resurfacing of paved areas, and exterior changes or improvements which do not materially increase or concentrate stormwater runoff, or cause additional nonpoint source pollution.²
60. *Regulated Activity.* Any activity which will, or which may reasonably be expected to, result in the discharge of dredged or fill material into waters of the U.S. excepting those activities exempted in section 404 of the Federal Clean Water Act.
61. *Public Right-of-way.* "Public Right-of-way" shall mean a strip or parcel of land occupied by or intended to be occupied by a street, crosswalk, pedestrian path, cart path, utility system, water main, sanitary sewer or storm drain sewer main, drainage ditches and watercourses or any other valid public use. The usage of the term "right-of-way" for land platting purposes shall mean that every right-of-way hereafter established and shown on a record or final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way, and not included within the dimensions or areas of such other lots or parcels. Rights-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains or other use involving maintenance by a public [agency, shall be dedicated or deeded to public] use by the maker of the plat on which such right-of-way is established.
62. *Roadway Drainage Structure.* Bridges, culverts and ditches associated with roadway construction, which allow stream flows to move freely under a stream crossing or to convey stormwater runoff from a roadway to a stream.

² MNGWPD, Adopted Post Construction Stormwater Runoff Ordinance.

63. *Runoff Coefficient*. The ratio of runoff to rainfall.
64. *Sediment*. Solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, ice, or gravity as a product of erosion.
65. *Sedimentation*. The action or process of forming or depositing sediment.
66. *Sedimentation Facility*. A facility specifically developed for the purpose of allowing the deposition of sediment resulting from the land development process.
67. *Shear Failure*. Failure of an earthen bank caused by the steepness of the slope.
68. *Stabilization*. The process of establishing an enduring soil cover of vegetation and/or mulch or other ground cover and/or combination with installing temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.
69. *State Waters*. Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, wet weather streams, and all other bodies of surface or subsurface water, including any waters which are subject to the ebb and flow of the ocean tides, natural or artificial, lying within or forming a part of the boundaries of the State of Georgia which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.
70. *Stormwater*. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation
71. *Stormwater Design Manual*. The Georgia Stormwater Management Manual, current edition, as published by the Atlanta Regional Commission and Houston County design standards. The Georgia Stormwater Management Manual is available online at www.georgiastormwater.org.
72. *Stormwater Facility*. A facility which provides for storage of stormwater runoff and controlled release of this runoff during and after a flood storm.
73. *Stormwater Pollution Prevention Plan (SWPPP)*. A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.
74. *Stormwater Runoff*. The portion of a precipitation on the land which reaches the drainage system.
75. *Stream*. Natural, running water flowing continuously or intermittently in a channel on or below the surface of the ground.
76. *Structural Erosion and Sediment Control Practices*. Measures for the stabilization of erosive or sediment-producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures, sediment traps, land grading, etc.

77. *Structural Stormwater Control.* A structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity, the quality, the period of release or the velocity of flow.
78. *Structure.* Anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground.
79. *Subdivision.* Subdivision includes all divisions of a tract or parcel of land into two or more lots, building sites, or other divisions for the purposes, whether immediate or future, of sale, gift, or building development and includes all divisions or development of land involving a new street or a change in an existing street. It shall also include resubdivision, the process of subdividing and the land or area subdivided; provided, however, divisions of land into parcels of five acres or more where no new street is involved are not included in this definition.
80. *Substantial Improvement.* Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure, either: (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purpose 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 structure. The term does not, however, include either:
- a. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
 - b. Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places; or
 - c. Any project that properly obtains a waiver from these requirements.
81. *Undisturbed Natural Buffer.* A tract of land in its natural undisturbed state where no vegetation can be removed or planted without a County permit. No herbicides, pesticides, or other chemicals, either natural or manmade can be used in this buffer.
82. *Utility.* Any public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, stormwater systems, and railroads or other utilities identified by Houston County.
83. *Vegetation.* All plant growth.
84. *Vegetative Erosion and Sediment Control Practices.* Measures for the stabilization of erosive or sediment producing areas by covering the soil with:
- a. Permanent seeding, sprigging or planting, producing long-term vegetative cover; or
 - b. Temporary seeding, producing short-term vegetative cover; or
 - c. Sodding, covering areas with a turf of perennial sod-forming grass.

85. *Watercourse*. Any natural or man-made conveyance channel, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which stormwater flows either continuously or intermittently and which has a definite channel, bed and banks, and including any areas adjacent thereto subject to inundation by reason of overflow or floodwater.
86. *Wetlands*. Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

ARTICLE III – ILLICIT DISCHARGE PROHIBITION

Section 1. General Provisions

1.1. Purpose

The purpose of this article is to provide for the health, safety, and general welfare of the citizens of Houston County through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable. The objectives of this article are:

- a. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user;
- b. To prohibit illicit connections and discharges to the MS4; and
- c. To establish legal authority to carry out all inspection; surveillance and monitoring; and enforcement procedures as necessary to ensure compliance with this article.

1.2. Applicability

This article shall apply to all non-stormwater discharges entering the storm drain system generated on any developed or undeveloped lands unless explicitly exempted by Houston County under Section 2 of this Article.

Section 2. Discharge Prohibitions

2.1. Prohibition of Illegal Discharges

No person shall discharge or cause to be discharged into the MS4 or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

- a. The following discharges are exempt from discharge prohibitions established by this article: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if dechlorinated - typically less than one PPM chlorine), fire fighting activities, and any other water source not containing pollutants.
- b. Discharges specified in writing by the Engineering Department as being necessary to protect public health and safety.

- c. Dye testing is an allowable discharge, but requires a verbal notification to the Engineering Department 24 hours prior to the time of the test followed by written notice within 10 days.
- d. Any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that approval has been granted for any discharge to the storm drain system. Proof of compliance with said permit may be required in a form acceptable to the Engineering Department prior to the allowing of discharges to the MS4.
- e. Any stormwater discharge regulated under an NPDES stormwater discharge permit for industrial activities provided that the discharger is in full compliance with all requirements of the permit. Proof of compliance with said permit may be required in a form acceptable to the Engineering Department prior to the allowing of discharges to the MS4.
- f. Any stormwater discharge regulated under an NPDES stormwater discharge permit for construction activities or other local land disturbance permit provided that the discharger is in full compliance with all requirements of the permit. Proof of compliance with said permit may be required in a form acceptable to the Engineering Department prior to the allowing of discharges to the MS4.

2.2. Prohibition of Illicit Connections

The construction, use, maintenance or continued existence of illicit connections to the MS4 or watercourses is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

Section 3. Suspension of MS4 Access

3.1. Suspension due to Illicit Discharges in Emergency Situations

The Engineering Department may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge that presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the Engineering Department may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

3.2. Suspension Due to the Detection of Illicit Discharge

Any person discharging to the MS4 or watercourses in violation of this article may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The

Engineering Department will notify a violator of the proposed termination of its MS4 access. The violator may petition the Engineering Department for a reconsideration and hearing.

A person commits a violation of this Article if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior written approval of the Engineering Department.

Section 4. Monitoring of Discharges

4.1. Applicability

This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

4.2. Access to Facilities

- a. The Engineering Department shall be permitted to enter and inspect facilities subject to regulation under this article as often as may be necessary to determine compliance with this article. If a discharger has security measures in force, which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the Engineering Department.
- b. Facility operators shall allow the Engineering Department ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
- c. The Engineering Department shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the Engineering Department to conduct monitoring and/or sampling of the facility's stormwater discharge.
- d. The Engineering Department has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- e. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the Engineering Department and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- f. Unreasonable delays in allowing the Engineering Department access to a permitted facility is a violation of a stormwater discharge permit and of this article. A person who is the operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity commits a violation if the person denies the Engineering Department

reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this article.

- g. If the Engineering Department has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then Houston County may seek issuance of a search warrant from any court of competent jurisdiction.

Section 5. Requirement to Prevent, Control & Reduce Stormwater Pollutants

5.1. Specification of Best Management Practices

Houston County may adopt requirements identifying Best Management Practices for any activity, operation, or facility, which may cause or contribute to pollution or contamination of stormwater, the MS4 or watercourses, or waters of the U.S.

5.2. Pollution Prevention in New Facilities

The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 or watercourses through the use of these structural and non-structural BMPs.

5.3. Pollution Prevention in Existing Facilities

Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the MS4 or watercourses.

5.4. Discharge Permits from Regulatory Agencies other than Houston County

Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. BMPs designated for compliance with the NPDES permit or BMPs implemented as a result of action taken in compliance of this Article shall be included in a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

Section 6. Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow

of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

Section 7. Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the MS4 or watercourses, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the Engineering Department in person, by phone, facsimile or email no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Engineering Department within three business days of the phone notice. The notification of the discharge of materials to the Engineering Department shall be in addition to notification of other applicable County, Regional, State and Federal authorities. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Section 8. Enforcement

8.1. Notice of Violation

Whenever the Engineering Department finds that a person has violated a prohibition or failed to meet a requirement of this article, the Engineering Department may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:

- a. The performance of monitoring, analyses, and reporting;
- b. The elimination of illicit connections or discharges;
- c. That violating discharges, practices, or operations shall cease and desist;
- d. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- e. Payment of a fine to cover administrative and remediation costs; and
- f. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established

deadline, the work may be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

8.2. Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the Engineering Department to Superior Court. The notice of appeal must be received within 10 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the reviewing authority or their designee shall be final.

8.3. Enforcement Measures After Appeal

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 10 days of the decision of the reviewing authority upholding the decision of the Engineering Department, then representatives of the Engineering Department shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the Engineering Department or designated contractor to enter upon the premises for the purposes set forth above.

8.4. Cost of Abatement of the Violation

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 30 days. If the amount due is not paid within a timely manner as determined by the decision of the reviewing authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

8.5. Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this article. If a person has violated or continues to violate the provisions of this article, the Engineering Department may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

8.6. Compensatory Action

In lieu of enforcement proceedings, penalties, and remedies authorized by this article, Houston County may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

8.7. Violations Deemed a Public Nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this article is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

8.8. Criminal Prosecution

Any person that has violated or continues to violate this article shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$2,500 dollars per violation per day.

Houston County may recover all attorneys' fees, court costs and other expenses associated with enforcement of this article, including sampling and monitoring expenses.

8.9. Remedies not Exclusive

The remedies listed in this article are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

ARTICLE IV – POST CONSTRUCTION STORMWATER RUNOFF

Section 1. General Provisions

1.1. Purpose

The purpose of this article is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This article seeks to meet that purpose through the following objectives:

- a. Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream and drainage channels;
- b. Minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality;
- c. Minimize the total annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable; and
- d. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

1.2. Applicability

This article shall be applicable to all development plan applications, unless eligible for an exemption or granted a waiver by the Engineering Department under the specifications of Section 3 of this article. This article also applies to land development activities that are smaller than the minimum applicability criteria if such activities are part of a larger common plan of development that meets the following applicability criteria, even though multiple separate and distinct land development activities may take place at different times on different schedules.

- a. New development that involves the creation of 5,000 square feet or more of impervious cover, or that disturbs one acre or more of land;
- b. Redevelopment that includes the creation, addition or replacement of 5,000 square feet or more of impervious cover, or that involves other land development activity of one acre or more;
- c. Any new development or redevelopment, regardless of size, that is defined by the Engineering Department to be a hotspot land use; or
- d. Land development activities that are smaller than the minimum applicability criteria set forth in items a. and b. above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

- e. Any development project regardless of size deemed by the Engineering Department that shall contribute to a known or suspected water quality or quantity impairment.

1.3. Exempt Activities

The following activities are exempt from this article:

- a. Individual single-family or duplex residential lots that are not part of a subdivision or phased development project;
- b. Additions or modifications to existing single-family or duplex residential structures;
- c. Agricultural or silvicultural land management activities within areas zoned for these activities; and
- d. Repairs to any stormwater management facility or practice deemed necessary by the Engineering Department.

When a site development plan is submitted that qualifies as a redevelopment project as defined in Article II of this ordinance, decisions on permitting and on-site stormwater requirements shall be governed by special stormwater sizing criteria found in the current Local Stormwater Design Manual (LDM). This criteria is dependent on the amount of impervious area created by the redevelopment and its impact on water quality. Final authorization of all redevelopment projects will be determined after a review by the Engineering Department.

1.4. Development of a Local Stormwater Design Manual (LDM)

Houston County may furnish additional policy, criteria and information including specifications and standards, for the proper implementation of the requirements of this ordinance and will provide such information in the form of a LDM. The LDM will serve to supplement and/or clarify information set forth in the Georgia Stormwater Management Manual.

The LDM will include a list of acceptable stormwater treatment practices, including the specific design criteria and operation and maintenance requirements for each stormwater practice. The manual may be updated and expanded from time to time, at the discretion of Houston County, based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards during the design and permitting phase of a land development project.

Section 2. Permit Procedures and Requirements

2.1. Permit Required

No land owner or land operator shall receive any of the building, grading or other land development permits required for land disturbance activities without first meeting the requirements of this article prior to commencing the proposed activity.

2.2. Application Requirements

Unless specifically excluded by this article, any landowner or operator desiring a permit for a land disturbance activity shall submit to Houston County a permit application on a form provided for that purpose. Unless otherwise excepted by this article, a permit application must include the minimum requirements as defined in this article or LDM in order for the permit application to be considered.

2.3. Application Review Fees

Houston County may require the submittal of a review fee for review of the stormwater management plan. This review fee shall be based on the amount of land to be disturbed at the site, and the fee structure shall be established by the Houston County Board of Commissioners. All of the monetary contributions shall be credited to a local budgetary category to support local plan review, inspection and program administration, and all fees shall be paid prior to the issuance of any development permits.

2.4. Application Procedure

All applications received by Houston County will be received and processed in the manner outlined in the Land Development Ordinance of Houston County.

2.5. Permit Duration

Permits issued under this section shall be valid from the date of issuance through the date the Engineering Department notifies the permit holder that all stormwater management practices have passed the final inspection required under permit condition. Should no activity take place on the site, the permit shall expire within one year of issuance.

Section 3. Waivers to Stormwater Management Requirements

3.1. Waivers for Providing Stormwater Management

Every applicant shall provide for stormwater management as required by this article, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to the Engineering Department for approval.

The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions apply or the applicant presents sufficient engineering data and analysis to support their request for a waiver as determined by the local jurisdiction:

- a. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this article.

- b. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the Engineering Department and local ordinance (or some other legally enforceable document) that requires the implementation of the plan.
- c. Provisions are made to manage stormwater by an off-site facility. The off-site facility is required to be in place, to be designed and adequately sized to provide a level of stormwater control that is equal to or greater than that which would be afforded by on-site practices and there is a legally obligated entity responsible for long-term operation and maintenance of the stormwater practice.
- d. The Engineering Department finds that meeting the minimum on-site management requirements is not feasible due to the natural or existing physical characteristics of a site.
- e. Non-structural practices will be used on the site that reduce: a) the generation of stormwater from the site; b) the size and cost of stormwater storage; and c) the pollutants generated at the site. These non-structural practices shall be explained in detail in the local or state design manual and the amount of credit available for using such practices shall be determined by the Engineering Department.

3.2. Conditions of Waiver

In instances where one of the conditions above applies, the Engineering Department may grant a waiver from strict compliance with these stormwater management provisions, as long as acceptable mitigation measures are provided. However, to be eligible for a variance, the applicant must demonstrate to the satisfaction of the Engineering Department that the waiver will not result in the following impacts to downstream waterways:

- a. Deterioration of existing culverts, bridges, dams, and other structures;
- b. Degradation of biological functions or habitat;
- c. Accelerated stream bank or streambed erosion or siltation; and
- d. Increased threat of flood damage to public health, life, and property.

3.3. Mitigation Requirements for Waivers

Where compliance with minimum requirements for stormwater management is waived, the applicant will satisfy the minimum requirements by meeting one of the mitigation measures selected by the Engineering Department. Mitigation measures may include, but are not limited to, the following:

- a. The purchase and donation of privately owned lands, or the grant of an easement to be dedicated for preservation and/or reforestation. These lands should be located adjacent to the stream corridor in order to provide permanent buffer areas to protect water quality and aquatic habitat.
- b. The creation of a stormwater management facility or other drainage improvements on previously developed properties, public or private, that currently lack stormwater

management facilities designed and constructed in accordance with the purposes and standards of this article.

- c. Monetary contributions (Fee-in-Lieu) to fund stormwater management activities such as research and studies (e.g., regional wetland delineation studies, stream monitoring studies for water quality and macroinvertebrates, stream flow monitoring, threatened and endangered species studies, hydrologic studies, and monitoring of stormwater management practices, etc.).

3.4. Fee in Lieu of Stormwater Management Practices

Where the Engineering Department waives all or part of the minimum stormwater management requirements, or where the waiver is based on the provision of adequate stormwater facilities provided downstream of the proposed development, the applicant may be required to pay a fee in an amount as determined by the Engineering Department.

When an applicant obtains a waiver of the required stormwater management, the monetary contribution required shall be in accordance with a fee schedule (unless the developer and Houston County agree on a greater alternate contribution) established by the Houston County Board of Commissioners. All of the monetary contributions shall be credited to an appropriate capital improvements program project, and shall be made by the developer prior to the issuance of any development permits.

3.5. Dedication of Land

In lieu of a monetary contribution, an applicant may obtain a waiver of the required stormwater management by entering into an agreement with Houston County for the granting of an easement or the dedication of land by the applicant, to be used for the construction of an off-site stormwater management facility. The agreement shall be entered into by the applicant and Houston County prior to the recording of plats or, if no record plat is required, prior to the issuance of the development permits.

Section 4. General Performance Criteria for Stormwater Management

Unless judged by the Engineering Department to be exempt or granted a waiver, the following performance criteria shall be addressed for stormwater management at all sites:

- a. All site designs shall establish stormwater management practices to control the peak flow rates of stormwater discharge associated with specified design storms and reduce the generation of stormwater. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
- b. All stormwater runoff generated from new development shall not discharge untreated stormwater directly into a state water without adequate control of stormwater runoff.

Where such discharges are proposed, the impact of the proposal on wetland functional values shall be assessed using a method acceptable to the Engineering Department. In no case shall the impact on functional values be any less than allowed by the Army Corp of Engineers (ACE) or the Georgia Department of Natural Resources.

- c. Annual groundwater recharge rates shall be maintained to the maximum extent practical, by promoting infiltration through the use of structural and non-structural methods where allowable.
- d. For new development, stormwater treatment practices shall be designed to remove pollutants to levels prescribed in the current LDM. It is presumed that a BMP complies with this performance standard if it is:
 - 1. sized to capture the prescribed water quality volume (WQ_v);
 - 2. designed according to the specific performance criteria outlined in the LDM;
 - 3. constructed properly; and
 - 4. maintained regularly.
- e. To protect stream channels from degradation, a specific channel protection criteria shall be provided as prescribed in the current LDM.
- f. Stormwater discharges to critical areas with sensitive resources (i.e., fisheries, shellfish beds, swimming beaches, recharge areas, etc.) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
- g. Certain industrial sites are required to prepare and implement a stormwater pollution prevention plan, and shall file a notice of intent (NOI) under the provisions of the National Pollutant Discharge Elimination System (NPDES) general permit. The stormwater pollution prevention plan requirement applies to both existing and new industrial sites.
- h. Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as “hotspots”, may require the use of specific structural stormwater treatment practices (STPs) and pollution prevention practices.
- i. Prior to design, applicants are encouraged to consult with the Engineering Department to determine if they are subject to additional stormwater design requirements.
- j. The calculations for determining peak flows as found in the LDM shall be used for sizing all stormwater management practices.

Section 5. Basic Stormwater Management Design Criteria

5.1. Minimum Control Requirements

All stormwater management practices will be designed so that the specific storm frequency storage volumes (e.g., recharge, water quality, channel protection, 10-year, 100-year) as identified in the LDM are met, unless the Engineering Department grants the applicant a waiver or the applicant is exempt from such requirements. In addition, if hydrologic or topographic

conditions warrant greater control than that provided by the minimum control requirements, the Engineering Department reserves the right to impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.

5.2. Site Design Feasibility

Stormwater management practices for a site shall be chosen based on the physical conditions of the site. Applicants shall consult the current LDM for guidance on the factors that determine site design feasibility when selecting a stormwater management practice.

5.3. Conveyance Issues

All stormwater management practices shall be designed to convey stormwater to allow for the maximum removal of pollutants and reduction in flow velocities. The current LDM shall provide detailed guidance on the requirements for conveyance for each of the approved stormwater management practices.

5.4. Landscaping Plans Required

All stormwater management practices that utilize wetlands vegetation as part of the functional treatment process (e.g. constructed wetlands, etc.) must submit a separate landscaping plan detailing both the vegetation to be in the practice and how and who will manage and maintain this vegetation. This plan must be prepared by an individual having a professional certification by the Society of Wetlands Scientists and has completed three projects of a similar nature that have been successfully implemented or equivalent qualifications as determined by the Engineering Department.

5.5. Maintenance Agreements

All stormwater treatment practices shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater treatment practice. In addition, a legally binding covenant specifying the parties responsible for the proper maintenance of all stormwater treatment practices shall be secured prior to issuance of any permits for land disturbance activities. An example of the covenant can be found in the LDM.

5.6. Non-Structural Stormwater Practices

The use of non-structural stormwater treatment practices is encouraged in order to minimize the reliance on structural practices. Credit in the form of reductions in the amount of stormwater that must be managed can be earned through the use of non-structural practices that reduce the generation of stormwater from the site. These non-structural practices are explained in detail in

the current LDM and applicants wishing to obtain credit for use of non-structural practices must ensure that these practices are documented and remain unaltered by subsequent property owners.

Section 6. Requirements for Stormwater Management Plan Approval

6.1. Stormwater Management Plan Required for All Developments

No application for development will be approved unless it includes a stormwater management plan detailing in concept how runoff and associated water quality impacts resulting from the development will be controlled or managed. This plan must be certified by a professional engineer or landscape architect licensed in the State of Georgia. Further, pursuant to the provisions contained in O.C.G.A. 43-15-2, as amended, a surveyor registered in the State of Georgia may prepare hydrologic studies and design stormwater drainage systems. Said plan must indicate whether stormwater will be managed on-site or off-site and if on-site, the general location and type of practices.

The stormwater management plan(s) shall be referred for comment to all other interested agencies, and any comments must be addressed in a final stormwater management plan. This final plan must be signed by a professional engineer, landscape architect or surveyor licensed in the State of Georgia, who will verify that the design of all stormwater management practices meet the submittal requirements outlined in the Submittal Checklist found in the current LDM. No development permits shall be issued until a satisfactory final stormwater management plan, or a waiver thereof, shall have undergone a review and been approved by the Engineering Department after determining that the plan or waiver is consistent with the requirements of this article.

6.2. Stormwater Management Plan Requirements

A stormwater management plan shall be required with all Land Disturbance Activity (LDA) permit applications and will include sufficient information (e.g., maps, hydrologic calculations, etc.) to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site – both present and future – on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. The intent of this planning process is to determine the type of stormwater management measures necessary for the proposed project, and ensure adequate planning for management of stormwater runoff from future development. To accomplish this goal the applicant will prepare a design report which shall include elements sufficient to ensure compliance with this article as outlined in the current LDM. The Engineering Department reserves the right to extend these requirements to ensure compliance with this article if the requirements in the current LDM prove to be insufficient. However, in these cases, the Engineering Department must provide a written explanation of the additional elements needed to the applicant.

6.3. Performance Bond/Security

Houston County may, at its discretion, require the submittal of a performance security or bond in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security shall be the total estimated construction cost of the stormwater management practices approved under the permit, plus 25% as agreed to by the applicant and Houston County. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan.

The installation performance security shall be released in full only upon submission of "as-built plans" and written certification by a professional engineer, landscape architect or registered surveyor licensed in the State of Georgia that the stormwater practice will function in accordance with the approved plan and other applicable provisions of this article. The Engineering Department will make a final inspection of the stormwater practice to ensure that it is in compliance with the approved plan and the provisions of this article. Provisions for a partial pro-rata release of the performance security based on the completion of various development stages may be done at the discretion of the Engineering Department.

6.4. Errors and Omissions Insurance

Houston County shall require a professional engineer, landscape architect or registered surveyor licensed in the State of Georgia to maintain in full force and effect Errors and Omissions Liability Insurance in the amount of \$1,000,000 per occurrence while practicing in Houston County. Said Certificate of Insurance shall be submitted to the Engineering Department to confirm that such insurance has been procured and is in force.

Section 7. Construction Inspection

7.1. Notice of Construction Commencement

The applicant must notify the Engineering Department in advance before the commencement of construction. If any violations are found, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. No added work shall proceed until any violations are corrected and all work previously completed has received approval by the Engineering Department.

7.2. As-Built Plans

All applicants are required to submit actual "as-built" plans for any stormwater management practices located both on-site and off-site after final construction is completed in a format specified in the current LDM. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer, landscape architect or registered surveyor licensed in the State of Georgia. A final inspection by the Engineering Department is required before the release of any performance securities can occur.

7.3. Landscaping and Stabilization Requirements

Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be revegetated within ten days from the substantial completion of such clearing and construction. The following criteria shall apply to revegetation efforts:

- a. Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.
- b. Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
- c. Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one year is achieved.

In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed in accordance with other such requirements in Houston County Code of Ordinances. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

Section 8. Maintenance and Repair of Stormwater Facilities

8.1. Maintenance Easement

Prior to the issuance of any Certificate of Occupancy or Final Plat that has a stormwater management facility as part of the project, the applicant or owner of the site must execute a maintenance easement agreement that shall be binding on all subsequent owners of land served by the stormwater management facility. The agreement shall provide for access to the facility at reasonable times for periodic inspection by the Engineering Department, or their contractor or agent, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this article.

8.2. Maintenance Covenants

Maintenance of all stormwater management facilities shall be ensured through the creation of a formal maintenance covenant that must be approved by the Engineering Department and recorded into the Final Plat prior to final approval. As part of the covenant, a schedule shall be developed for when and how often maintenance will occur to ensure proper function of the

stormwater management facility. The covenant shall also include plans for periodic inspections to ensure proper performance of the facility between scheduled cleanouts.

Houston County, in lieu of a maintenance covenant, may accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this article and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

8.3. Requirements for Maintenance Covenants

Stormwater management facilities may be required to undergo annual inspections to document maintenance and repair needs and ensure compliance with the requirements of this article and accomplishment of its purposes. These needs may include: removal of silt, litter and other debris from all catch basins, inlets and drainage pipes; grass cutting and vegetation removal; and necessary replacement of landscape vegetation. Any maintenance needs found must be addressed in a timely manner, as determined by the Engineering Department, and the inspection and maintenance requirement may be increased as deemed necessary to ensure proper functioning of the stormwater management facility. The requirement for such inspections shall be outlined in the maintenance covenant.

8.4. Inspection of Stormwater Facilities

Inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater treatment practices.

8.5. Right-of-Entry for Inspection

When any new drainage control facility is installed on private property, or when any new connection is made between private property and a public drainage control system or sanitary sewer, the property owner shall grant to the Engineering Department the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when it has a reasonable basis to believe that a violation of this ordinance is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this ordinance.

8.6. Records of Installation and Maintenance Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least three years. These records shall be made available to the Engineering Department during inspection of the facility and at other reasonable times upon request.

8.7. Failure to Maintain Practices

If a responsible party fails or refuses to meet the requirements of the maintenance covenant, Houston County, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the Engineering Department shall notify the party responsible for maintenance of the stormwater management facility in writing. Upon receipt of that notice, the responsible person shall affect maintenance and repair of the facility in an approved manner and within the established deadline. After proper notice, Houston County may assess the owner(s) of the facility for the cost of repair work and any penalties; and the cost of the work shall be a lien on the property, or prorated against the beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by Houston County.

Section 9. Enforcement and Penalties

9.1. Violations

Any development activity that is commenced or is conducted contrary to this article may be restrained by injunction or otherwise abated in a manner provided by law.

9.2. Notice of Violation

When the Engineering Department determines that an activity is not being carried out in accordance with the requirements of this article, the Engineering Department shall issue a written notice of violation to the owner of the property.

The notice of violation shall contain:

- a. the name and address of the owner or applicant;
- b. the address when available or a description of the building, structure or land 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 development activity into compliance with this Ordinance and a time schedule for the completion of such remedial action;
- e. a statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed as provided herein; and

- f. a statement that the determination of violation may be appealed to the County by filing a written notice of appeal within three days of service of notice of violation.

Persons receiving a notice of violation may be required to halt all construction activities via a Stop Work Order.

9.3. Stop Work Orders

This “stop work order” will be in effect until the Engineering Department confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner as determined by the Engineering Department can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this article.

9.4. Civil and Criminal Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this article shall be punished by a fine of not less than two thousand five hundred dollars (\$2,500). Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.

9.5. Restoration of Lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, Houston County may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

9.6. Holds on Occupation Permits

Occupation permits will not be granted until all corrections to all stormwater practices have been made and accepted by the Engineering Department.

ARTICLE V – FLOOD DAMAGE PREVENTION

Section 1. Statutory Authorization, Findings of Fact, Purpose & Objectives

1.1. Statutory Authorization

The Legislature of the State of Georgia has, in O.C.G.A. § 36-1-20, delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the Houston County Board of Commissioners does hereby adopt the following floodplain management regulations.

1.2. Findings of Fact

- a. The flood hazard areas of Houston County are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- b. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.

1.3. Statement of Purpose

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- a. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights or velocities;
- b. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction or substantial improvement;
- c. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- d. Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- e. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

1.4. Objectives

The objectives of this article are:

- a. To protect human life and health;
- b. To minimize expenditure of public money for costly flood control projects;
- c. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d. To minimize prolonged business interruptions;
- e. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, street and bridges located in floodplains;
- f. To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas
- g. To ensure that potential homebuyers are notified that property is in a potential flood area; and
- h. Comply with the requirements of the National Flood Insurance Program so as to ensure the availability of flood insurance for residents and property owners.

1.5. Methods of Reducing Flood Losses

In order to accomplish its purposes, this article includes methods and provisions for:

- a. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- b. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- c. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- d. Controlling filling, grading, dredging, and other development which may increase flood damage; and
- e. Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or may increase flood hazards in other areas.

Section 2. General Provisions

2.1. Lands to Which This Article Applies

This article shall apply to all areas of special flood hazard as designated by Houston County within the zoning and building code jurisdiction of Houston County.

2.2. Basis for Establishing the Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency in the **Flood Insurance Study (FIS) or Flood Insurance Rate Maps (FIRM)**, dated **March 18, 1987** with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this article. The Flood Insurance Study is on file in the County Engineer's Office. In addition, the County Engineer shall reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to identify a special flood hazard not otherwise identified by the Federal Emergency Management Agency. This data is also on file with the County Engineer's Office.

2.3. Establishment of Development Permit

A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.

2.4. Compliance

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.

2.5. Abrogation and Greater Restrictions

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

2.6. Interpretation

In the interpretation and application of this article all provisions shall be:

- a. Considered as minimum requirements;
- b. Liberally construed in favor of the governing body; and
- c. Deemed neither to limit nor repeal any other powers granted under state statutes.

2.7. Warning and Disclaimer of Liability

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This article 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 article shall not create liability on the part of Houston County or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

2.8. Penalties for Violation

Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than two thousand five hundred (\$2,500), or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the County or its agent from taking such other lawful actions as is necessary to prevent or remedy any violation.

Section 3. Administration

3.1. Designation of Flood Damage Prevention Article Administrator

The Houston County Board of Commissioners hereby appoints the Chief Building Official/Zoning Officer (or his agent) to administer and implement the provisions of this article and is herein referred to as the Floodplain Article Administrator, the Floodplain Management Administrator and/or the Administrator.

3.2. Permit Procedures-Application Phase

No application for land development within any area of special flood hazard will be approved unless it includes a floodplain management/flood damage prevention plan. This plan shall be made to the Floodplain Management Administrator on forms furnished by him or her prior to any development activities. This plan shall be in accordance with the criteria established in this section.

This plan must be submitted with the stamp and signature of a Professional Engineer, Landscape Architect or Registered Surveyor licensed in the state of Georgia, who will verify that, all designs are consistent with the requirements of this article.

The approved floodplain management/flood prevention damage 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 at any time if the construction and building activities are not in strict accordance with approved plans.

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:

1. Site plan, including but not limited to:

- (i) 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;
 - (ii) Proposed locations of water supply, sanitary sewer, and utilities;
 - (iii) If applicable, the base flood elevation and location of the base flood boundary; and
 - (iv) If applicable, the location and elevation of the floodway.
2. Foundation design detail, including but not limited to:
 - (i) Proposed elevation in relation to mean sea level (or highest adjacent grade) of the lowest finished floor, including basement, of all structures; and
 - (ii) For crawl-space foundation, location and total net area of foundation openings as required in Section 4.2.c.1. of this article.
 3. Proposed elevation in relation to mean sea level to which any substantial improvements to an existing non-residential structure will be flood-proofed, as required in Section 4 of this article;
 4. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed land development; and
 5. All appropriate certifications required under this article.
 - a. If the project proposes to alter the configuration of the watercourse for which a detailed flood study has been developed (or the boundaries of a floodway), the applicant shall submit the proposed grading and drainage plans, stormwater management plans, floodplain studies, and all supporting computer modeling to the FEMA region IV office for a conditional letter of map revision. The project will not receive final approval until the proposed alteration of the watercourse (and/or floodway boundaries) has been approved by FEMA.
 - b. If a proposed project will alter the boundaries of the area of special flood hazard as shown on the FEMA flood insurance rate maps, the applicant shall submit the approved grading and drainage plans, stormwater management plans, floodplain studies, and all supporting computer modeling to the FEMA region IV office for a conditional letter of map revision, within 30 days of receiving final approval.
 - c. Within 30 days following completion of the entire project or a phase thereof, the applicant shall submit certified copies of the final, constructed grading and drainage plans and stormwater management plans to the FEMA region IV office for a issuance of a final letter of map revision.
 - d. The zoning administrator shall be provided copies of all related correspondence, and shall sign the required community acknowledgement form.

3.3. Permit Procedures-Construction Phase

Upon placement of the lowest floor, it shall be the duty of the permit holder to submit to the Floodplain Management Administrator a certification of the NGVD 88 (National Geodetic Vertical Datum) elevation of the lowest floor or flood-protected elevation, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a professional engineer, landscape architect or registered surveyor and certified by same. When flood proofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or landscape architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop work order for the project.

3.4. Duties and Responsibilities of the Floodplain Management Administrator

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

- a. Review all development permits to assure that the permit requirements of this article have been satisfied.
- b. Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
- c. Notify adjacent communities, the State Floodplain Coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.
- d. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- e. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with Section 3.3.
- f. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-protected, in accordance with Section 3.3.
- g. Review certified plans and specifications for compliance.
- h. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Management Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this section.
- i. When base flood elevation data or floodway data have not been provided in accordance with Section 2.2 then the Floodplain Management Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal,

state or other source, in order to administer the provisions of Section 4.) Review all development permits to assure that the permit requirements of this chapter have been satisfied.

- j. Advise permittees that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permit be provided and maintained on file with the development permit.
- k. Notify adjacent communities, the state department of natural resources (and any other appropriate agencies, such as regional planning, water management, or flood control districts) prior to any alteration or relocation of a watercourse, and submit evidence of such notification along with a copy of the notice to the FEMA region IV office.
- l. Assure that the flood-carrying capacity of the watercourse is not diminished by the proposed alteration or relocation.
- m. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with this Section.
- n. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood proofed, in accordance with this Section.
- o. When flood proofing is utilized for a particular building, obtain certification from a registered professional engineer or landscape architect, in accordance with this Section.
- p. Determine whether a building or development site is located within an area of special flood hazard by referencing the FEMA flood insurance study and accompanying maps, or other available and appropriate data. If detailed topographic mapping is available, the boundary of the area of special flood hazard shall be plotted on such mapping utilizing the base flood elevations provided for the area in question. This more detailed definition of the boundary of the base flood shall be utilized as best available data for purposes of regulating the area of special flood hazard. If there are significant discrepancies between the boundary as shown on the FEMA maps and the topographic mapping available, the zoning administrator shall so advise the FEMA region IV office.
- q. Within A zones along rivers, streams, lakes, swamps, and marshes, determine the appropriate base flood elevation for each individual building site utilizing the flood data tables (for lakes) and the stream profiles contained in the FEMA flood insurance study. The base flood elevations printed on the FEMA maps are illustrative only. The zoning administrator shall interpolate the base flood elevation at a site between two given base flood elevation markers by referring to the stream profiles and measuring the distance of the site upstream or downstream from a cross section shown on the FEMA map.
- r. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and the natural grade of actual field conditions) make the necessary interpretation, utilizing the most accurate topographic mapping available. The elevations published in the FEMA flood insurance study, as portrayed in the profile sheets, shall be the ruling reference for delineating the boundary of the floodplain. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the

interpretation as provided in this article. Property may not be excluded from the area of special flood hazard as a result of filling unless a letter of map revision has been approved by FEMA.

- s. Where the zoning administrator has determined all or a portion of a property to be located outside of the flood hazard area, yet it is shown as being within the flood hazard area on the FEMA maps, the applicant shall be advised of the need to obtain a letter of map amendment or revision from the FEMA Region IV Office and shall be given an application packet utilizing forms provided by FEMA. While the property may be exempt from the requirements of this chapter, flood insurance purchase will remain mandatory until FEMA authorizes a letter of map amendment or revision.
- t. When base flood elevation data or floodway data have not been provided in accordance with section 34-7, obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of article III of this chapter. Base flood elevations may be estimated using topographic maps or scientific engineering methodology. Base flood elevation and delineation of the boundaries of the special flood hazard areas shall be developed and provided for subdivision proposals and other proposed developments (including industrial parks, shopping centers, public facilities, and manufactured home parks and subdivisions) that are greater in size than the lesser of 50 lots or five acres. Also, floodway data shall be developed for all definable streams subject to a flood study. Base flood elevation, flood hazard area boundary mapping, and floodway data, if developed, shall be submitted to the FEMA region IV office within 30 days of receipt and acceptance by the community for review as a possible map revision.
- u. When a development project will cause a reconfiguration of the flood hazard area due to grading, filling, channel alteration, or relocation, development of a stormwater management system, or the excavation of lakes, require the applicant to submit and obtain approval from FEMA of a conditional letter of map revision. Where a floodway is being impacted, this must be obtained prior to construction. Following completion of all or each phase of such a development, the zoning administrator shall require the applicant to submit to FEMA the as-built topographic and hydrologic information to obtain a final letter of map revision.
- v. The office of the zoning administrator shall serve as the official map repository for FEMA flood insurance rate maps, flood boundary and floodway maps (if applicable), and flood hazard boundary maps for the community, together with letters of map amendment (LOMAs) and letters of map revision (LOMRs). At least one copy of all current and superseded maps, LOMAs, and LOMRs shall be maintained for public use and viewing.
- w. All records pertaining to the provisions of this Section shall be maintained in the office of the zoning administrator and shall be open for public inspection. Copies of all development permits and summary supporting documentation shall be filed by geographic area for ease of coordinating all floodplain development activities.

Section 4. Provisions for Flood Hazard Reduction

4.1. General Standards

In all areas of special flood hazard the following provisions are required:

- a. New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- b. 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;
- c. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- d. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- e. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- f. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- g. 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;
- h. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- i. Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this article shall meet the requirements of “new construction” as contained in this article; and
- j. Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this article, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

4.2. Specific Standards

In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Section 2.2, the following provisions are required:

- a. **Residential Construction.** New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than **36 inches** above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate

the unimpeded movement of flood waters shall be provided in accordance with standards of Section 4.2.c.1.

- b. **Non-Residential Construction.** New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to no lower than **36 inches** above the level of the base flood elevation. Buildings located in all A-Zones may be flood-proofed in lieu of being elevated provided that all areas of the building below the Base Flood Elevation (plus any community free board) elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or landscape architect shall certify that the flood-proofing standards of this subsection are satisfied.
- c. **Elevated Buildings.** New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevations shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - 1. Designs for complying with this requirement must either be certified by a professional engineer or landscape architect or meet the following minimum criteria:
 - (i) 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;
 - (ii) The bottom of all openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade); and
 - (iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - 2. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator);
 - 3. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms; and
 - 4. Where elevation requirements exceed **six feet** above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the building's originally approved design shall be presented as a condition of issuance of the final Certificate of Occupancy.
- d. **Manufactured Homes and Recreational Vehicles.** Standards for manufactured homes and recreational vehicles.

1. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in a new manufactured home park or subdivision or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.
2. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
 - (i) The lowest floor of the manufactured home is elevated no lower than **36 inches** above the level of the base flood elevation, or
 - (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than **36 inches** in height above the ground.
 - (iii) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood, any manufactured home placed or substantially improved must meet the standards of Section 4.2.d.
3. All recreational vehicles placed on sites must either:
 - (i) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or
 - (ii) Meet all the requirements for new construction, including anchoring and elevation requirements of Section 4.2 (a) or (b) (i) and (iii) above; or
 - (iii) Be on the site for fewer than 180 consecutive days.

4.3. Standards for Streams with designated Special Flood Hazard Areas

1. Prohibit encroachments within the floodplain or floodway, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer, landscape architect or registered surveyor that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge;
2. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 4; and,
3. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards, the elevation standards, and the encroachment standards of this Article are met.

4.4. Standards for Streams without designated Special Flood Hazard Areas

- a. When base flood elevation data or floodway data have not been provided in accordance with Section 2.2, then the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 4. If data is not available from other sources, then the following provisions shall apply.
 1. No encroachments, including fill material or structures, shall be located within the established 100 year floodplain, unless certification by a registered professional engineer, landscape architect or registered surveyor is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge, and appropriate State and Federal regulations are followed.
 2. New construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than **36 inches** above the calculated flood elevation. The flood elevation will be calculated following guidelines provided in the FEMA publication *Managing Floodplain Development in Approximate Zone A Areas, A Guide for Obtaining and Developing Base (100-Year) Flood Elevations*.³

4.5. Standards for Subdivision Proposals (AO Zones)

Located within the areas of special flood hazard established in Section 2.2, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of **one to three feet**, where a clearly defined channel does not exist and the water path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- a. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than **three feet** above the highest adjacent grade.⁴
- b. All new construction and substantial improvements of non-residential structures shall:
 1. Have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map above the highest adjacent grade. If no

³ NOTE: A building in a SFHA as stated above, can never be elevated less than two feet above the highest adjacent grade (HAG) as defined in Section 2 without a Letter of Map Correction being issued first. The insurance rates for post FIRM buildings in these areas drop drastically after five feet of elevation. A building elevated to seven feet above the HAG, maintains an “uninhabitable” space below the lowest floor and a space usable for parking, storage, and access. It also is provided with a high level of flood damage protection for a flood condition that is virtually unknown. In all cases, it is recommended that, unless it is required to produce a Base Flood Elevation for all development, the local attorney be consulted regarding culpability and liability for utilizing default values for unknown hazardous conditions.

⁴ Recommend freeboard of at least 1 foot.

flood depth number is specified, the lowest floor, including basement, shall be elevated at least **two feet**⁵ above the highest adjacent grade; or

2. Together with attendant utility and sanitary facilities be completely flood-proofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per Section 4.2.b.

4.6. Standards for Subdivision Proposals

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- d. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty lots or five acres.

4.7. Critical Facility

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated **three feet** or more above the level of the base flood elevation at the site. Flood proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 5. Variance Procedures

5.1. Designation of Zoning and Appeals Board

The Houston County Zoning and Appeals Board (or its agent) as established by the Houston County Board of Commissioners shall hear and decide appeals and requests for variances from requirements of this article.

⁵ Recommend freeboard of at least 1 foot.

5.2. Duties of Zoning and Appeals Board

The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Management Administrator in the enforcement or administration of this article. Any person aggrieved by the decision of the board may appeal such decision to the Board of Commissioners.

5.3. Variance Procedures

In passing upon such applications, the County (or its agent) shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and:

- a. The danger that materials may be swept onto other lands to the injury of others;
- b. The danger of life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d. The importance of the services provided by the proposed facility to the community;
- e. The necessity to the facility of a waterfront location, where applicable;
- f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- g. The compatibility of the proposed use with existing and anticipated development;
- h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- j. The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

5.4. Conditions for Variances

- a. Variances shall only be issued when there is:
 1. A showing of good and sufficient cause;
 2. A determination that failure to grant the variance would result in exceptional hardship; and
 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or articles.

- b. Variances shall only be issued upon a 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.
- c. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the lowest floor is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- d. The Floodplain Management Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency or Georgia Emergency Management Agency upon request.

5.5. Variance Notification

Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

- a. The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance, and
- b. Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the Floodplain Management Administrator in the Office of the Houston County Superior Court Clerk and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land. The Floodplain Management Administrator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in the community’s biennial report submission to the Federal Emergency Management Agency.

5.6. Historic Structures

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 is the minimum to preserve the historic character and design of the structure.

5.7. Special Conditions

Upon consideration of the purposes of this article, the Houston County Zoning and Appeals Board (or its agent) may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

5.8. No-Impact Certification Within Designated Special Flood Hazard Areas.

Variances shall not be issued within any designated Special Flood Hazard Area if an increase in flood levels during the base flood discharge would result.

ARTICLE VI – EROSION AND SEDIMENTATION

Section 1. Title

This ordinance will be known as “Houston County’s Soil Erosion and Sedimentation Control Ordinance.”

Section 2. Definitions

The following definitions shall apply in the interpretation and enforcement of this ordinance, unless otherwise specifically stated:

2.1 *Best Management Practices (BMP’s):*

A collection of structural practices and vegetative measures which, when properly designed, installed and maintained, will provide effective erosion and sedimentation control. The term “properly designed” means designed in accordance with the hydraulic design specifications contained in the “Manual for Erosion and Sediment Control in Georgia” specified in O.C.G.A. 12-7-6 subsection (b).

2.2 *Board:* The Board of Natural Resources.

2.3 *Buffer:* The area of land immediately adjacent to the banks of state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

2.4 *Commission:* The State Soil & Water Conservation Commission.

2.5 *Cut:* A portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to excavated surface. Also known as excavation.

2.6 *Department:* The Department of Natural Resources.

2.7 *Director:* The Director of the Environmental Protection Division of the Department of Natural Resources.

2.8 *District:* The Ocmulgee Soil and Water Conservation District.

2.9 *Division:* The Environmental Protection Division of the Department of Natural Resources.

2.10 *Drainage Structure:* A device composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by

intercepting the flow and carrying it to a release point for stormwater management, drainage control, or flood control purposes.

2.11 **Erosion:** The process by which land surface is worn away by the action of wind, water, ice or gravity.

2.12 **Erosion and Sedimentation Control Plan:** A plan for the control of soil erosion and sedimentation resulting from a land- disturbing activity. Also known as the “plan”.

2.13 **Fill:** A portion of land surface to which soil or other solid material has been added; the depth above the original ground.

2.14 **Finished Grade:** The final elevation and contour of the ground after cutting or filling and conforming to the proposed design.

2.15 **Grading:** Altering the shape of ground surfaces to a predetermined condition; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and shall include the land in its cut or filled condition.

2.16 **Ground Elevation:** The original elevation of the ground surface prior to cutting or filling.

2.17 **Land-Disturbing Activity:** Any activity which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land but not including agricultural practices as described in Section III, Paragraph 5.

2.18 **Larger Common Plan of Development or Sale:** A contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or sale. For the purposes of this paragraph, “plan” means an announcement; piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, or computer design; or physical demarcation such as boundary signs, lot stakes, or surveyor markings, indicating that construction activities may occur on a specific plot.

2.19 **Local Issuing Authority:** The governing authority of any county or municipality which is certified pursuant to subsection (a) O.C.G.A. 12-7-8.

2.20 **Metropolitan River Protection Act (MRPA):** A state law referenced as O.C.G.A. 12-5-440 et.seq. which addresses environmental and developmental matters in certain metropolitan river corridors and their drainage basins.

2.21 **Natural Ground Surface:** The ground surface in its original state before any grading, excavation or filling.

2.22 **Nephelometric Turbidity Units (NTU):** Numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloiddally dispersed particles are present.

2.23 **Operator:** The party or parties that have: (A) operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or (B) day-to-day operational control of those activities that are necessary to ensure compliance with a storm-water pollution prevention plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the storm-water pollution prevention plan or to comply with other permit conditions.

2.24 **Permit:** The authorization necessary to conduct a land-disturbing activity under the provisions of this ordinance.

2.25 **Person:** Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision of this State, any interstate body or any other legal entity.

2.26 **Project:** The entire proposed development project regardless of the size of the area of land to be disturbed.

2.27 **Qualified Personnel:** Any person who meets or exceeds the education and training requirements of O.C.G.A. 12-7-19.

2.28 **Roadway Drainage Structure:** A device such as a bridge, culvert, or ditch, composed of a virtually nonerrodible material such as concrete, steel, plastic, or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled way consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

2.29 **Sediment:** Solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, ice, or gravity as a product of erosion.

2.30 **Sedimentation:** The process by which eroded material is transported and deposited by the action of water, wind, ice or gravity.

2.31 **Soil and Water Conservation District Approved Plan:** An erosion and sedimentation control plan approved in writing by the Ocmulgee soil and water conservation district.

2.32 **Stabilization:** The process of establishing an enduring soil cover of vegetation by the installation of temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.

2.33 **State General Permit:** The National Pollution Discharge Elimination System general permit or permits for stormwater runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251, et seq., and subsection (f) of Code Section 12-5-30.

2.34 **State Waters:** Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

2.35 **Structural Erosion and Sedimentation Control Practices:** Practices for the stabilization of erodible or sediment producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures, sediment traps and land grading, etc. Such practices can be found in the publication *Manual for Erosion and Sediment Control in Georgia*.

2.36 **Trout Streams:** All streams or portions of streams within the watershed as designated by the Game and Fish Division of the Georgia Department of Natural Resources under the provisions of the Georgia Water Quality Control Act, O.C.G.A. 12-5-20 et. seq. Streams designated as primary trout waters are defined as water supporting a self- sustaining population of rainbow, brown or brook trout. Streams designated as secondary trout waters are those in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. First order trout waters are streams into which no other streams flow except springs.

2.37 **Vegetative Erosion and Sedimentation Control Measures:** Measures for the stabilization of erodible or sediment producing areas by covering the soil with:

- a. Permanent seeding, sprigging or planting, producing long-term vegetative cover; or
- b. Temporary seeding, producing short-term vegetative cover; or
- c. Sodding, covering areas with a turf of perennial sod forming grass.

Such measures can be found in the publication *Manual for Erosion and Sediment Control in Georgia*.

2.38 **Watercourse:** Any natural or artificial watercourse, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water flows either continuously or intermittently and which has a definite channel, bed and banks, and including any area adjacent thereto subject to inundation by reason of overflow or floodwater.

2.39 **Wetlands:** Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a

prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Section 3. Exemptions

This ordinance shall apply to any land disturbing activity undertaken by any person on any land, except for the following:

1. Surface mining, as the same is defined in O.C.G.A. 12-4-72, "Mineral Resources and Caves Act";
2. Granite quarrying and land clearing for such quarrying;
3. Such minor land-disturbing activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities which result in minor soil erosion;
4. The construction of single-family residences, when such construction disturbs less than one acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements as set forth in Section IV of this ordinance and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to Article 2 of Chapter 5 of the Georgia Water Quality Control Act. In any such buffer zone, no land-disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the Director may grant variances to no less than 25 feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted. The minimum requirements of Section IV of this ordinance and the buffer zones provided by this section shall be enforced by the issuing authority;
5. Agricultural operations as defined in O.C.G.A. 1-3-3, "definitions", to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including but not limited to cattle, calves, swine, hogs, goats, sheep, and rabbits or for use in the production of poultry, including but not limited to chickens, hens and turkeys; producing plants, trees, fowl, or animals; the production of aqua culture, horticultural, dairy, livestock, poultry, eggs and apiarian products; farm buildings and farm ponds;
6. Forestry land management practices, including harvesting; provided, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in paragraphs (15) and (16) of Section IV C. of this

ordinance, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of three years after completion of such forestry practices;

7. Any project carried out under the technical supervision of the Natural Resources Conservation Service of the United States Department of Agriculture;

8. Any project involving less than one acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre or within 200 feet of the bank of any state waters, and for purposes of this paragraph, "State Waters" excludes channels and drainageways which have water in them only during and immediately after rainfall events and intermittent streams which do not have water in them year-round; provided, however, that any person responsible for a project which involves less than one acre, which involves land-disturbing activity, and which is within 200 feet of any such excluded channel or drainageway, must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained herein shall prevent the Local Issuing Authority from regulating any such project which is not specifically exempted by paragraphs 1, 2, 3, 4, 5, 6, 7, 9 or 10 of this section;

9. Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the Department of Transportation, the Georgia Highway Authority, or the State Tollway Authority; or any road construction or maintenance project, or both, undertaken by any county or municipality; provided, however, that construction or maintenance projects of Department of Transportation or State Tollway Authority which disturb five one or more contiguous acres of land shall be subject to provisions of O.C.G.A. 12-7-7.1; except where the Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the local issuing authority, the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

10. Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case the local issuing authority shall enforce compliance with the

minimum requirements set forth in O.C.G.A. 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

11. Any public water system reservoir.

Section 4. Minimum Requirements for Erosion and Sedimentation Control Using Best Management Practices

4.1 General Provisions

Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities. Therefore, plans for those land-disturbing activities which are not exempted by this ordinance shall contain provisions for application of soil erosion and sedimentation control measures and practices. The provisions shall be incorporated into the erosion and sedimentation control plans. Soil erosion and sedimentation control measures and practices shall conform to the minimum requirements of Section IV B. & C. of this ordinance. The application of measures and practices shall apply to all features of the site, including street and utility installations, drainage facilities and other temporary and permanent improvements. Measures shall be installed to prevent or control erosion and sedimentation pollution during all stages of any land disturbing activity.

4.2 Minimum Requirements/BMPs

a. Best management practices as set forth in Section IV B. & C. of this ordinance shall be required for all land-disturbing activities. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with paragraph (2) of this subsection or any substantially similar terms contained in a permit for the discharge of stormwater issued pursuant to subsection (f) of O.C.G.A. 12-5-30, the "Georgia Water Quality Control Act". As used in this subsection the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. 12-7-6 subsection (b).

b. A discharge of stormwater runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land disturbing permit issued by a local Issuing Authority or of any state general permit issued by the Division pursuant to subsection (f) of O.C.G.A. 12-5-30, the "Georgia Water Quality Control Act", for each day on which such discharge results in the turbidity of receiving waters being increased by more than 25 nephelometric turbidity units for waters supporting warm water fisheries or by more than ten nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the Director. This paragraph shall not apply to any land disturbance associated with the construction of single family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five acres.

c. Failure to properly design, install, or maintain best management practices shall constitute a violation of any land-disturbing permit issued by a Local Issuing Authority or of any state general permit issued by the Division pursuant to subsection (f) of Code Section 12-5-30, the "Georgia Water Quality Control Act", for each day on which such failure occurs.

d. The Director may require, in accordance with regulations adopted by the Board, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land disturbing activities occur.

e. The rules and regulations, ordinances, or resolutions adopted pursuant to this chapter for the purpose of governing land-disturbing activities shall require, as a minimum, protections at least as stringent as the state general permit; and best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the *Manual for Erosion and Sediment Control in Georgia* published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

1. Stripping of vegetation, regrading and other development activities shall be conducted in a manner so as to minimize erosion;
2. Cut-fill operations must be kept to a minimum;
3. Development plans must conform to topography and soil type so as to create the lowest practical erosion potential;
4. Whenever feasible, natural vegetation shall be retained, protected and supplemented;
5. The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;
6. Disturbed soil shall be stabilized as quickly as practicable;
7. Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;
8. Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;
9. To the extent necessary, sediment in run-off water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. 12-7-1 et. seq.;
10. Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping of fills;

11. Cuts and fills may not endanger adjoining property;
12. Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;
13. Grading equipment must cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;
14. Land-disturbing activity plans for erosion and sedimentation control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on-site or preclude sedimentation of adjacent waters beyond the levels specified in Section IV B. 2. of this ordinance;
15. Except as provided in paragraph (16) of this subsection, there is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the Director pursuant to O.C.G.A. 12-2-8, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; provided, however, the buffers of at least 25 feet established pursuant to part 6 of Article 5, Chapter 5 of Title 12, the "Georgia Water Quality Control Act", shall remain in force unless a variance is granted by the Director as provided in this paragraph. The following requirements shall apply to any such buffer:
 - a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and
 - b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

16. There is established a 50 foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of Title 12, the "Georgia Water Quality Control Act", except where a roadway drainage structure must be constructed ; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the Board, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The Director may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer:

a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed: provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

e. Nothing contained in this chapter shall prevent any Local Issuing Authority from adopting rules and regulations, ordinances, or resolutions which contain stream buffer requirements that exceed the minimum requirements in Section IV B. & C. of this ordinance.

f. The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this ordinance or the terms of the permit.

Section 5. Application/Permit Process

5.1 General

The property owner, developer and designated planners and engineers shall review the general development plans and detailed plans of the Local Issuing Authority that affect the tract to be developed and the area surrounding it. They shall review the zoning ordinance, stormwater management ordinance, subdivision ordinance, flood damage prevention ordinance, this ordinance, and other ordinances which regulate the development of land within the jurisdictional boundaries of the Local Issuing Authority. However, the operator is the only party who may obtain a permit.

5.2 Application Requirements

- a. No person shall conduct any land disturbing activity within Houston County's jurisdictional boundaries without first obtaining a permit from the County Engineer to perform such activity.
- b. The application for a permit shall be submitted to the County Engineer must include the applicant's erosion and sedimentation control plan with supporting data, as necessary. Said plans shall include, as a minimum, the data specified in Section V Paragraph C of this ordinance. Soil erosion and sedimentation control plans shall conform to the provisions of Section IV Paragraphs B. & C. of this ordinance. Applications for a permit will not be accepted unless accompanied by five (5) copies of the applicant's soil erosion and sedimentation control plans. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan or that such a visit was not required in accordance with rules and regulations established by the board.
- c. A local fee, in the amount of fifty (\$50.00) dollars shall be assessed each builder when applying for a residential or commercial building construction permit.
- d. In addition to the local fees, fees will also be assessed pursuant to paragraph (5) subsection (a) of O.C.G.A. 12-5-23, provided that such fees shall not exceed \$80.00 per acre of land disturbing activity, and these fees shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity included in the planned development or each phase of development. All applicable fees shall be paid prior to issuance of the land disturbance permit. In a jurisdiction that is certified pursuant to subsection (a) of O.C.G.A. 12-7-8 half of such fees levied shall be submitted to the division; except that any and all fees due from an entity which is required to give notice pursuant to paragraph (9) or (10) of O.C.G.A. 12-7-17 shall be submitted in full to the division, regardless of the existence of a local issuing authority in the jurisdiction.

e. Immediately upon receipt of an application and plan for a permit, the Local Issuing Authority shall refer the application and plan to the District for its review and approval or disapproval concerning the adequacy of the erosion and sedimentation control plan. A District shall approve or disapprove a plan within 35 days of receipt. Failure of a District to act within 35 days shall be considered an approval of the pending plan. The results of the District review shall be forwarded to the Issuing Authority. No permit will be issued unless the plan has been approved by the District, and any variances required by Section IV Paragraph C. 15. & 16. and bonding, if required as per Section V B.5. (b), have been obtained. Such review will not be required if the Issuing Authority and the District have entered into an agreement which allows the Issuing Authority to conduct such review and approval of the plan without referring the application and plan to the District.

f. If a permit applicant has had two or more violations of previous permits, this ordinance section, or the Erosion and Sedimentation Act, as amended, within three years prior to the date of filing of the application under consideration, the Local Issuing Authority may deny the permit application.

g. The Local Issuing Authority may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but not exceeding, \$3,000.00 per acre or fraction thereof of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this ordinance or with the conditions of the permit after issuance, the Local Issuing Authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance. These provisions shall not apply unless there is in effect an ordinance or statute specifically providing for hearing and judicial review of any determination or order of the Local Issuing Authority with respect to alleged permit violations.

5.3 Plan Requirements

a. Plans must be prepared to meet the minimum requirements as contained in Section IV Paragraphs B. & C. of this ordinance. Conformance with the minimum requirements may be attained through the use of design criteria in the current issue of the *Manual for Erosion and Sediment Control in Georgia*, published by the State Soil and Water Conservation Commission as a guide; or through the use of more stringent, alternate design criteria which conform to sound conservation and engineering practices. The *Manual for Erosion and Sediment Control in Georgia* is hereby incorporated by reference into this ordinance. The plan for the land-disturbing activity shall consider the interrelationship of the soil types, geological and hydrological characteristics, topography, watershed, vegetation, proposed permanent structures including roadways, constructed waterways, sediment control and storm water management facilities, local ordinances and State laws.

b. Data Required for Site Plan

1. Narrative or notes, and other information: Notes or narrative to be located on the site plan in general notes or in erosion and sediment control notes.
2. Description of existing land use at project site and description of proposed project.
3. Name, address, and phone number of the property owner.
4. Name and phone number of 24-hour local contact who is responsible for erosion and sedimentation controls.
5. Size of project, or phase under construction, in acres.
6. Activity schedule showing anticipated starting and completion dates for the project. Include the statement in **bold letters**, that “the installation of erosion and sedimentation control measures and practices shall occur prior to or concurrent with land-disturbing activities.”
7. Stormwater and sedimentation management systems-storage capacity, hydrologic study, and calculations, including off-site drainage areas.
8. Vegetative plan for all temporary and permanent vegetative measures, including species, planting dates, and seeding, fertilizer, lime, and mulching rates. The vegetative plan should show options for year-round seeding.
9. Detail drawings for all structural practices. Specifications may follow guidelines set forth in the *Manual for Erosion and Sediment Control in Georgia*.
10. Maintenance statement - “Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion and sediment control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.”

c. Maps, drawings, and supportive computations shall bear the signature/seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sedimentation control. After December 31, 2006, all persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements as developed by the commission pursuant to C.O.G.A. 12-7-20. The certified plans shall contain:

1. Graphic scale and north point or arrow indicating magnetic north.
2. Vicinity maps showing location of project and existing streets.
3. Boundary line survey.

4. Delineation of disturbed areas within project boundary.
5. Existing and planned contours, with an interval in accordance with the following:

Map Scale	Ground Slope	Contour Interval, ft.
1 inch = 100ft or larger scale	Flat 0-2%	0.5 or 1
	Rolling 2-8%	1 or 2
	Steep 8%	2,5 or 10

6. Adjacent areas and feature areas such as streams, lakes, residential areas, etc. which might be affected should be indicated on the plan.
7. Proposed structures or additions to existing structures and paved areas.
8. Delineate the 25-foot horizontal buffer adjacent to state waters and the specified width in MRPA areas.
9. Delineate the specified horizontal buffer along designated trout streams, where applicable.
10. Location of erosion and sedimentation control measures and practices using coding symbols from the *Manual for Erosion and Sediment Control in Georgia*, Chapter 6.

d. Maintenance of all soil erosion and sedimentation control practices, whether temporary or permanent, shall be at all times the responsibility of the property owner.

5.4 Permits

- a. Permits shall be issued or denied as soon as practicable but in any event not later than forty-five (45) days after receipt by the Local Issuing Authority of a completed application, providing variances and bonding are obtained, where necessary.
- b. No permit shall be issued by the Local Issuing Authority unless the erosion and sedimentation control plan has been approved by the District and the Local Issuing Authority has affirmatively determined that the plan is in compliance with this ordinance, any variances required by Section IV Paragraph C. 15. & 16. are obtained, bonding requirements, if necessary, as per Section V Paragraph B. 5. (b) are met and all ordinances and rules and regulations in effect within the jurisdictional boundaries of the Local Issuing Authority are met. If the permit is denied, the reason for denial shall be furnished to the applicant.
- c. If the tract is to be developed in phases, then a separate permit shall be required for each phase.

d. The permit may be suspended, revoked, or modified by the Local Issuing Authority, as to all or any portion of the land affected by the plan, upon finding that the holder or his successor in the title is not in compliance with the approved erosion and sedimentation control plan or that the holder or his successor in title is in violation of this ordinance. A holder of a permit shall notify any successor in title to him as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.

Section 6. Inspection and Enforcement

a. The County Engineer and Chief Building Official will periodically inspect the sites of land-disturbing activities for which permits have been issued to determine if the activities are being conducted in accordance with the plan and if the measures required in the plan are effective in controlling erosion and sedimentation. (i.e., the County Engineer shall inspect all commercial lots and general subdivision development, while the Chief Building Official shall inspect all residential building lots .) Also, the Local Issuing Authority shall regulate both primary and secondary permittees as such terms are defined in the state general permit. Primary permittees shall be responsible for installation and maintenance of best management practices where the primary permittee is conducting land-disturbing activities. Secondary permittees shall be responsible for installation and maintenance of best management practices where the secondary permittee is conducting land-disturbing activities. If, through inspection, it is deemed that a person engaged in land-disturbing activities as defined herein has failed to comply with the approved plan, with permit conditions, or with the provisions of this ordinance, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance.

b. The County Engineer and Chief Building Official shall have the power to conduct such investigations as it may reasonably deem necessary to carry out duties as prescribed in this ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigation and inspecting the sites of land-disturbing activities.

c. No person shall refuse entry or access to any authorized representative or agent of the Issuing Authority, the Commission, the District, or Division who requests entry for the purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out his official duties.

d. The Districts or the Commission or both shall periodically review the actions of counties and municipalities which have been certified as Local Issuing Authorities pursuant to O.C.G.A. 12-7-8 (a). The Districts or the Commission or both may provide technical assistance to any county or municipality for the purpose of improving the effectiveness of the county's or municipality's erosion and sedimentation control program. The Districts or the Commission shall notify the Division and request investigation by the Division if any deficient or ineffective local program is found.

e. The Board, on or before December 31, 2003, shall promulgate rules and regulations setting forth the requirements and standards for certification and the procedures for decertification of a local issuing authority. The Division may periodically review the actions of counties and municipalities which have been certified as Local Issuing Authorities pursuant to Code Section 12-7-8 (a). Such review may include, but shall not be limited to, review of the administration and enforcement of a governing authority's ordinance and review of conformance with an agreement, if any, between the district and the governing authority. If such review indicates that the governing authority of any county or municipality certified pursuant to O.C.G.A. 12-7-8 (a) has not administered or enforced its ordinances or has not conducted the program in accordance with any agreement entered into pursuant to O.C.G.A. 12-7-7 (d) (e), the Division shall notify the governing authority of the county or municipality in writing. The governing authority of any county or municipality so notified shall have 30 days within which to take the necessary corrective action to retain certification as a Local Issuing Authority. If the county or municipality does not take necessary corrective action within 30 days after notification by the division, the division may revoke the certification of the county or municipality as an a Local Issuing Authority.

Section 7. Penalties and Incentives

7.1 Failure to Obtain a Permit for Land-disturbing Activity

If any person commences any land-disturbing activity requiring a land-disturbing permit as prescribed in this ordinance without first obtaining said permit, the person shall be subject to revocation of his business license, work permit or other authorization for the conduct of a business and associated work activities within the jurisdictional boundaries of the Issuing Authority.

7.2 Stop-work Orders

a. For the first and second violations of the provisions of this ordinance, the Director or the Local Issuing Authority shall issue a written warning to the violator. The violator shall have five days to correct the violation. If the violation is not corrected within five days, the Director or the Local Issuing Authority shall issue a stop-work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided, however, that, if the violation presents an imminent threat to public health or waters of the state or if the land-disturbing activities are conducted without obtaining the necessary permit, the Director or the Local Issuing Authority shall issue an immediate stop-work order in lieu of a warning;

b. For a third and each subsequent violation, the Director or the Local Issuing Authority shall issue an immediate stop-work order; and;

c. All stop-work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred.

d. When a violation in the form of taking action without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the local issuing authority or by the

director or his or her designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the local issuing authority or by the director or his or her designee. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

Section 7.3 Bond Forfeiture

If, through inspection, it is determined that a person engaged in land-disturbing activities has failed to comply with the approved plan, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance and, in addition to other penalties, shall be deemed to have forfeited his performance bond, if required to post one under the provisions of Section V B. 5. (b). The Issuing Authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

Section 7.4 Monetary Penalties

Any person who violates any provisions of this ordinance, or any permit condition or limitation established pursuant to this ordinance, or who negligently or intentionally fails or refuses to comply with any final or emergency order of the Director issued as provided in this ordinance shall be liable for a civil penalty not to exceed \$2,500.00 per day. For the purpose of enforcing the provisions of this ordinance, notwithstanding any provisions in any City charter to the contrary, municipal courts shall be authorized to impose penalty not to exceed \$2,500.00 for each violation. Notwithstanding any limitation of law as to penalties which can be assessed for violations of county ordinances, any magistrate court or any other court of competent jurisdiction trying cases brought as violations of this ordinance under county ordinances approved under this ordinance shall be authorized to impose penalties for such violations not to exceed \$2,500.00 for each violation. Each day during which violation or failure or refusal to comply continues shall be a separate violation.

Section 8. Education and Certification

After December 31, 2006, all persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the commission in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. 12-7-20.

Section 9. Administrative Appeal, Judicial Review

9.1 Administrative Remedies

The suspension, revocation, modification or grant with condition of a permit by the Issuing 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 ordinance; shall entitle the person submitting the plan or holding the permit to a hearing before the Houston County Board of Zoning Appeals within thirty (30) days after receipt by the Issuing Authority of written notice of appeal.

9.2 Judicial Review

Any person, aggrieved by a decision or order of the Issuing Authority, after exhausting his administrative remedies, shall have the right to appeal denovo to the Superior Court of Houston County.

Section 10. Effectivity, Validity and Liability

10.1 Effectivity

This ordinance shall become effective upon adoption by the Board of Commissioners.

10.2 Validity

If any section, paragraph, clause, phrase, or provision of this ordinance shall be adjudged invalid or held unconstitutional, such decisions shall not affect the remaining portions of this ordinance.

10.3 Liability

a. Neither the approval of a plan under the provisions of this ordinance, nor the compliance with provisions of this ordinance shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law nor impose any liability upon the Issuing Authority or District for damage to any person or property.

b. The fact that a land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this ordinance or the terms of the permit.

c. No provision of this ordinance shall permit any persons to violate the Georgia Erosion and Sedimentation Act of 1975, the Georgia Water Quality Control Act or the rules and regulations promulgated and approved thereunder or pollute any Waters of the State as defined thereby.

Adopted this 7th day of September 2004.

ATTEST:

Director of Administration

Chairman

ARTICLE VII. GROUNDWATER RECHARGE AND MINIMUM LOT SIZE

Section 1. Minimum Lot Sizing Requirements

1.1 Permit Required

No building permit shall be issued for a building, structure, or manufactured home to be served by a septic tank, unless the building conforms to the requirements of these regulations. The County shall require a site plan or preliminary subdivision plan in sufficient detail to review the proposed development for compliance with the provisions of this section of the Comprehensive Development Regulations.

1.2 County Health Department Approval of Permit Required

No building permit shall be issued for a building, structure, or manufactured home to be served by a septic tank, unless the Houston County Health Department first approves the proposed septic tank installation as meeting the requirements of the Georgia Department of Human Resources Manual for On-Site Sewage Management Systems (hereinafter DHR Manual) and these regulations.

1.3 Minimum Lot Size

a. Lot size requirements are as follows for single family dwellings including, but not limited to manufactured or mobile homes, stick built homes, modular homes, etc.; lots in subdivisions, and for each mobile home located in a mobile home park. Multifamily dwellings on a single recorded lot, where not prohibited by local zoning, must be provided in multiples of the following minimum lot sizes for each residence offered for rent or sale on the recorded lot. The lot size for non-residential facilities shall be based on the proposed sewage flow. All minimum lot sizes shall be based on Table MT-1 and Table MT-2 of the DHR Manual summarized below and subparagraphs 81.3.1 through 81.3.6 as follows.

Minimum Lot Sizes and Maximum Allowable Sewage Flow for the Type of Water Supply System. For Single Family and Multifamily Residences and Non-Residential Facilities

	Type of Water Supply System	
	Non-Public* (Individual)	Public*
Minimum Lot Size	43,560 square feet	21,780 square feet
Minimum Lot Width	150 feet	100 feet
Maximum Sewage Flow	600 gpad**	1200gpad**

Definitions:

***In this context, "Non-Public" means an individual water supply system or any other water supply system which is not a "Public" water supply system.**

****gpad = gallons per acre per day = gal/acre/day.**

b. The above minimum lot sizes are for the typical size home (4 bedrooms) with basic appurtenances such as: driveway, minimum number of trees, and water supply line. If larger homes, swimming pools, tennis courts or outbuildings, etc. are proposed to be constructed or if trees would interfere with installation of an on-site sewage management system, the County Board of Health will require larger lots to assure useable soil area.

c. The County Board of Health may also require larger lot sizes when physical factors indicate the need to do so. These factors include, but are not limited to, the availability of sufficient unobstructed land areas for an approved on-site sewage management system and approved replacement system, slope greater than 5%, percolation rates higher than 45 minutes per inch, need for subsurface drainage or adverse topographic features.

d. Lots shall be a minimum width of one hundred feet (100') or one hundred fifty feet (150') measured within the area where an approved on-site sewage management system and replacement system are to be located when served by a public water supply system or non-public water supply system, respectively.

e. The following land areas are not considered as a part of a lot when calculating the required minimum lot size: right of ways of roads, easements (such as power line or pipe line) that exclude installation of an on-site sewage management system, bodies of water, land within 50 feet of a lake, river, stream, wetland or other bodies of water and similar limiting factors.

f. There must be an unobstructed area on each lot for installation of an approved on-site sewage management system and an area equal in size for a conventional system or larger area, as appropriate, for an approved replacement system. This will include sufficient area for necessary site modifications for installation of both the initial system and a replacement system. All pertinent County zoning set-backs and other space requirements must also be met.

g. The maximum daily sewage flow for each lot or parcel of land shall not exceed 600 gpad when served by a non-public or individual water supply system or 1200 gpad when served by a public water supply system. When sewage flows exceed these quantities (600 or 1200 gpad as indicated) for a given dwelling structure, the minimum lot size or parcel of land shall be increased proportionally. Example, assume a public water supply exists (so 1200 gpad maximum sewage flow allowed per minimum required land area of 21,780 square feet), and there is a proposed sewage flow of 5,000 gpd. To determine X = the square footage of the lot needed, use the following formula:

$$\begin{aligned}
X &= \frac{5,000 \text{ gal/day}}{1,200 \text{ gal/acre/day}} \\
&= 4.17 \text{ acres} \\
&= 4.17 \text{ acres} \times 43,560 \text{ sq. ft./acre} \\
&= 181,500 \text{ sq. ft. area of land needed}
\end{aligned}$$

Likewise, for a non-public (individual) water supply, to determine Y = the square footage of the lot needed for a proposed sewage flow of 5,000 gpd, use the following formula:

$$\begin{aligned}
X &= \frac{5,000 \text{ gal/day}}{600 \text{ gal/acre/day}} \\
&= 8.33 \text{ acres} \\
&= 8.33 \text{ acres} \times 43,560 \text{ sq. ft./acre} \\
&= 363,000 \text{ sq. ft. area of land needed}
\end{aligned}$$

Section 2. Criteria for Protection of Groundwater Recharge Areas

a. Significant recharge areas in Houston County shall be determined by using the Georgia Department of Natural Resources Hydrologic Atlas 18 map. Each significant recharge area in Houston County shall be determined to have a pollution susceptibility of high, medium (average), or low based on the Georgia Department of Natural Resources Hydrologic Atlas 20 map. Both of these maps are hereby adopted and made a part of these regulations as if fully set forth herein.

b. Rules of the Department of Natural Resources, Environmental Protection Division, Chapter 391-3-16-.02 require the following minimum lot sizes in the State of Georgia Groundwater Recharge areas as defined by the above.

2.1 Individual Lots and Subdivisions

New residences served by septic tank and absorption field systems shall be on lots having the following minimum size limitations as identified in Table MT-1 of the DHR Manual.

- a. 150% of the minimum lot size of Table MT-1 if the lot is within a high pollution susceptibility area;
- b. 125% of the minimum lot size of Table MT-1 if the lot is within a medium pollution susceptibility area;
- c. 110% of the minimum lot size of Table MT-1 if the lot is within a low susceptibility area.

2.2 Mobile Home Parks

New mobile home parks served by septic tank and absorption field systems shall be on lots having the following minimum size limitations as identified in Table MT-2 of the DHR Manual.

- a. 150% of the minimum lot size of Table MT-2 if the lot is within a high pollution susceptibility area;
- b. 125% of the minimum lot size of Table MT-2 if the lot is within a medium pollution susceptibility area;
- c. 110% of the minimum lot size of Table MT-2 if the lot is within a low susceptibility area.

2.3 Agricultural Waste Impoundment Sites

New agricultural waste impoundment sites in a significant recharge area, as specified below, shall contain a liner consisting of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than 5×10^{-7} cm/sec or other criteria established by the Natural Resource and Conservation Service:

- (a) Any agricultural waste impoundment site located in a high pollution susceptibility area;
- (b) Any agricultural waste impoundment site within a average or medium pollution susceptibility area which exceeds 15 acre-feet; or
- (c) Any agricultural waste impoundment site within a low pollution susceptibility area that exceeds 50 acre-feet.

Section 3. Above Ground Chemical or Petroleum Storage Tanks

New above-ground chemical or petroleum storage tanks have a minim volume of 660 gallons shall have secondary containment for 110% of the volume of such tanks or 110% of the volume of the largest tank in a cluster of tanks. Such tanks used for agricultural purposes are exempt, provided they comply with all federal requirements.

Section 4. Hazardous Materials Handling Facilities

New facilities that handle hazardous materials of the types listed in section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) and in amounts of 10,000 pounds or more on any one day, shall perform their operations on impervious surfaces and in conformance with any applicable federal spill prevention requirements and any adopted County fire code requirements.

Section 5. Stormwater Infiltration Basins

Permanent storm water infiltration basins shall not be constructed in significant recharge areas having high pollution susceptibility.

Section 6. Exemption

Any lot of record approved prior to the adoption of these regulations shall be exempt from the minimum lot size requirements of this section. No subdivision plat shall be recorded after the effective date of these regulations until and unless said plat has been reviewed and approved by the County as being in compliance with the minimum lot sizes established by this section.

Section 7. Effective Date

These regulations shall be effective on June 30, 2005.

Section 8. Uses Served by a Private (Non-Public) Water Supply System

All uses served by a private (non-public) water supply system, regardless of zoning district, shall have a minimum lot area of 43,560 square feet. Such lots shall have a minimum lot width of 150 feet and maximum lot coverage of 25 percent.

Section 9. Uses Served by a Public Water Supply System by Zoning District and Use

Within the zoning districts listed herein, the following requirements shall apply.

<u>District and Type of Use</u>	<u>Minimum Lot Area (Square Ft.)</u>	<u>Minimum Lot Width (Ft.) at Building Line</u>	<u>Maximum Lot Coverage (Percent)</u>
<u>R-AG Agriculture</u>			
All Permitted Uses			
Septic Tank with Open Ditch	43,560	200	25
Sewer with Curb & Gutter	43,560	125	25
<u>R-1 Single-Family</u>			
All Permitted Uses			
Septic Tank with Open Ditch	21,780 to 32,670 (1)	200	25
Septic Tank with Curb & Gutter	21,780 to 32,670 (1)	100	25
Sewer with Curb & Gutter	14,000	90	25
<u>R-2 Single-Family</u>			
All Permitted Uses			
Septic Tank with Curb & Gutter	21,780 to 32,670 (1)	100	25

Sewer	9,000	75	30
<u>R-3 Two-Family</u>			
Single-Family Detached (See Section 102.8.3.3.)			
Septic Tank with Curb & Gutter	21,780 to 32,670 (1)	100	25
Sewer	6,000	60	35
Single-Family Attached (2)	2,000 (3)	18	50
Single-Family Semi-Detached (2)	6,000	60	35
Two- Family			
Septic Tank with Curb & Gutter	43,560	100	25
Sewer	9,000	75	35
Multi-Family		See Section 81.23	
<u>District and Type of Use</u>	<u>Minimum Lot Area (Square Ft.)</u>	<u>Minimum Lot Width (Ft.) at Building Line</u>	<u>Maximum Lot Coverage (Percent)</u>
<u>RMH Residential Mobile Home</u>			
Individual Mobile Homes			
Septic Tank with Open Ditch	21,780 to 32,670 (1)	200	25
Septic Tank with Curb & Gutter	21,780 to 32,670 (1)	100	25
Sewer with Curb & Gutter	14,000	90	25
Mobile Home Subdivision			
Septic Tank with Open Ditch	21,780 to 32,670 (1)	200	25
Septic Tank with Curb & Gutter	21,780 to 32,670 (1)	100	25
Sewer with Curb & Gutter	14,000	90	25
Travel Trailer Parks & Campgrounds		See Section 91	
		Comprehensive Development Regulations	
<u>C-1 Neighborhood Commercial</u>			
All Permitted Uses			
Septic Tank	21,780 to 32,670 (1)	100	25
Sewer	3,500	30	25
<u>C-2 General Commercial</u>			
Multi-Family		See Section 10	
Other Permitted Uses			
Septic Tank	21,780 to 32,670 (1)	100	25
Sewer	3,500	30	25
<u>C-3 Concentrated Commercial</u>			
Multi-Family		See Section 10	

Other Permitted Uses			
Septic Tank	21,780 to 32,670 (1)	100	None
Sewer	3,500	30	None

M-1 Wholesale & Light Industry

All Permitted Uses			
Sewer Only	10,000	75	50

M-2 Industrial

All Permitted Uses			
Sewer Only	20,000	150	65

Footnotes

1. Lots in significant recharge areas serviced by septic tanks shall meet EPD Chapter 391-3-16-02 requirements. See Section 2.1 and 2.2.
2. All single-family attached and semi-detached dwellings shall be connected to a public or community sewer system. No septic tanks or other method of disposing of wastewater will be permitted.
3. The developer of single-family attached dwellings is required to set aside an additional 2,500 square feet of common open space for each dwelling unit which cannot be used for any other purpose. See Section 92 of Comprehensive Development Regulations.

Section 10. Multi-Family Residential Dwelling Units

a. Within use districts permitting multi-family dwellings, the minimum lot area shall be based on the following minimum lot area and maximum lot coverage requirements, except as otherwise provided herein:

<u>Height of Building (Number of Floors)</u>	<u>Minimum Number Of Units</u>	<u>Total Lot Area Per Unit (Square Feet)</u>	<u>Maximum Lot Coverage (Percent)</u>
One	3	3,000	40
Two	4	2,500	40
Three	6	2,100	40
Four	16	2,000	30
Five	20	1,500	30
Six to Eight	24	1,250	25
Eight or More	32	1,000	25

b. Within use districts permitting multi-family residential dwelling units, the minimum lot width measure at the building line shall be 85 feet.

c. All multi-family dwelling units shall be connected to public sewer. No septic tanks, or other methods of disposing of waste, will be permitted in any multi-family dwelling unit developments.

So Adopted this 5th day of February, 2004.

Attested By: _____
Director of Administration

Chairman

ARTICLE VIII. WATER RESOURCE PROTECTION OVERLAY DISTRICTS

Section 1. Purpose.

The intent of this section is to establish minimum development standards and criteria which will afford reasonable protection of environmentally sensitive natural resources found throughout the unincorporated area of Houston County. It has been determined the wise management of these resources as defined in this Section is essential to maintaining the health, safety, general welfare and economic well being of the public.

Section 2. Establishment of Water Resource Overlay Districts.

The Houston County's Water Resource Overlay Districts shall include the following:

Wetlands Protection District
River Corridor District

The boundaries of these Water Resource Districts are shown on a set of maps designated as "Water Resource Districts" and are included as part of Houston County's Official Zoning Map, which is on file with the Zoning Administrator's office located in the Houston County Courthouse Annex.

Section 3. Definitions.

In addition to the general definitions provided in this Ordinance, the following definitions shall apply to this Section:

- A. *Generalized Wetlands Map* - The current U.S. Fish and Wildlife Service National Wetlands Inventory Maps for Houston County, Georgia.
- B. *Hazardous Waste* - Any solid waste which has been defined as a hazardous waste in regulations promulgated by the administrator of the United States Environmental Protection Agency pursuant to the federal act, which are in force and effect on February 1, 1988, codified as 40 C. F. R. Section 261.3. (Note: This is same definition as used in the Georgia Hazardous Waste Management Act.)
- C. *Jurisdictional Wetland* - An area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers.
- D. *Jurisdictional Wetland Determination* - A delineation of jurisdictional wetland boundaries by the U.S. Army Corps of Engineers as required by Section 404 of the Clean Water Act, 33.U.S.C. § 1344, as amended.

- E. *Land-Disturbing Activity* - Any grading, scraping, excavating, or filling of land; clearing of vegetation; and any construction, rebuilding, or alteration of a structure. Land-disturbing activity shall not include activities such as ordinary maintenance and landscaping operations, individual home gardens, yard and grounds upkeep, repairs, additions or minor modifications to a single-family dwelling, and the cutting of firewood for personal use.
- F. *Natural Vegetative Buffer or Buffer Area* - A river corridor containing the flora native to that area. The natural floras for specific areas are described in Georgia Geologic Survey Bulletin 114, "the Natural Environments of Georgia." Habitats for endangered and threatened species may require human management of the river corridor in order to maintain those species.
- G. *Perennial River* - A river or section of a river that flows continuously throughout the year.
- H. *Protected River* - Any perennial river or watercourse with an average annual flow of at least 400 cubic feet per second as determined by appropriate U. S. Geological Survey documents. However, those segments of river covered by the Metropolitan River Protection Act or the Coastal Marshlands Protection Act are specifically excluded from the definition of a protected river.
- I. *Regulated Activity* - Any activity which will or which may reasonably be expected to result in the discharge of dredged or fill material into the waters of the U.S. excepting those activities exempted in Section 404 of the Federal Clean Water Act.
- J. *River Bank* - The rising ground, bordering a river, which serves to confine the water to the natural channel during the normal course of flow.
- K. *River Corridor* - All the land, inclusive of islands, not regulated under the Metropolitan River Protection Act (O.C.G.A. 12-5-440 through 12-5-457), or the Coastal Marshlands Protection Act (O.C.G.A. 12-5-280 through 12-5-293), in areas of a protected river and being within 100 feet horizontally on both sides of the river as measured from the river banks.

The 100-foot buffer shall be measured horizontally from the upper most part of the river banks, usually marked by a break-in slope. Although not within the measured 100-foot wide buffer, the area between the top of the bank and the edge of the river shall be treated by the local governments in the same manner as the river corridor and shall be included within the River Corridor Protection District.

Because stream channels move due to natural processes such as meandering river bank erosion and jumping of channels, the river corridor may shift with time. For the purposes of these standards, the river corridor shall be considered to be fixed at its position at the beginning of each review period for the Houston County Comprehensive Plan. Any shift

in the location of the protected river after the review period will be shown by revision of the boundaries of the river corridor at the time of the next Comprehensive Plan review by the Department of Community Affairs.

- L. *Sensitive Natural Area* - Any area, as identified now or hereafter by the Department of Natural Resources, which contains one or more of the following:
 - A. Habitat, including nesting sites, occupied by rare or endangered species;
 - B. Rare or exemplary natural communities;
 - C. Significant land forms, hydroforms, or geological features; or
 - D. Other areas so designated by the Department of Natural Resources and which are sensitive or vulnerable to physical or biological alteration.
- M. *Single-Family Dwelling* - A dwelling structure that is designed for the use of one family.
- N. *Utilities* - A service or services provided by a public utility company or private entity which provides such service or services and all equipment and structures necessary to provide such services.
- O. *Water Resource Districts* - A Water Resource District is a map overlay which imposes a set of requirements in addition to those of the underlying zoning district.
- P. *Wetlands* - Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrological vegetation and hydrological conditions involving a temporary or permanent source of water to cause soil saturation.

Section 4. Wetlands Protection Overlay District

- a. The wetlands within Houston County are indispensable and fragile natural resources with significant development constraints due to flooding, erosion and soil limitations. In their natural state, wetlands serve man and nature. They provide habitat areas for fish, wildlife and vegetation; water quality maintenance and pollution control; flood control; natural resource education; scientific study, and recreational opportunities. In addition, the wise management of forested wetlands is essential to the economic well being of many communities within the State of Georgia.
- b. Nationally, a considerable number of these important natural resources have been lost or impaired by draining, dredging, filling, excavating, building, pollution, and other acts. Piecemeal or cumulative losses will, over time, destroy additional wetlands. Damaging or destroying wetlands threatens public safety and the general welfare.
- c. The purpose of this Overlay District is to promote the wetlands protection, while taking into account varying ecological, economic development, recreation and aesthetic values.

Activities that may damage wetlands should be located on upland sites to the greatest degree practicable as determined through a permitting process.

Section 4.1 District Delineation

- a. The Wetlands Protection Overlay District is hereby established which shall correspond to all lands within the jurisdiction of Houston County, Georgia that are mapped as wetland areas by the U.S. Fish and Wildlife National Wetlands Inventory Maps. This map shall be referred to as the Generalized Wetlands Map and is hereby adopted by reference and declared to be part of this Ordinance, together with all explanatory matter thereon as attached thereto.
- b. The Generalized Wetlands Map does not necessarily represent the boundaries of jurisdictional wetlands within Houston County and cannot serve as a substitute for a delineation of wetland boundaries by the U.S. Army Corps of Engineers, as required by Section 404 of the Clean Water Act, as amended. Any local government action under this Ordinance does not relieve the landowner from federal or state permitting requirements.

Section 4.2. Wetland Development Permit Requirements

No regulated activity or use except those identified shall be allowed within the Wetland Overlay District without a development permit from Houston County. If the area proposed for development is located within fifty (50) feet of a Wetlands Protection Overlay District boundary as determined by the Zoning Enforcement Officer using the Generalized Wetlands Map, a U.S. Army Corps of Engineers determination shall be required. If the Corps determines that wetlands are present on the proposed development site, the development permit will not be granted until Section 404 Permit or Letter of Permission is issued.

Section 4.3. Permitted Uses

The following uses are permitted by right within the Wetland Protection Overlay District to the extent they are not prohibited by any other ordinance or law and provided they do not require structures, grading, fill, draining or dredging as provided herein. (These activities listed in this section are exempted from Section 404 regulations provided they do not have impacts on a navigable waterway that would necessitate acquisition of an individual 404 Permit. However, under Section 10 of the Rivers and Harbors Act, a permit may be required in some circumstances.)

1. Forestry practices applied in accordance with best management practices approved by the Georgia Forestry Commission and as specified in Section 404 of the Clean Water Act.
2. Conservation or preservation soil, water, vegetation, fish or other wildlife, provided it does not affect waters of the State of Georgia or of the United States in such a way that would require an individual 404 permit.

3. Outdoor passive recreational activities, including fishing, bird watching, hiking, boating, horseback riding and canoeing.
4. The cultivation of agricultural crops. Agricultural activities shall be subject to best management practices approved by the Georgia Department of Agriculture.
5. The pasturing of livestock, provided that riparian wetlands are protected, that soil profiles are not disturbed, and that approved agricultural best management practices are followed.
6. Education, scientific research and nature trails.

Section 4.4 Prohibited Uses

The following uses are prohibited in a Wetland District:

- a. Receiving areas for toxic or hazardous waste or other contaminants.
- b. Hazardous or sanitary landfills.

Section 5. River Corridor Protection Overlay District

- a. River corridors are the strips of land that flank major rivers in Georgia. These corridors are of vital importance to Georgia in that they help preserve those qualities that make a river suitable as a habitat for wildlife, a site for recreation, and a source for clean drinking water. River corridors also allow the free movement of wildlife from area to area within the state, help control erosion and river sedimentation, and help absorb floodwaters.
- b. The Ocmulgee River has been designated as a protected river by the State of Georgia. The purpose of this ordinance is to establish measures to guide future growth and development in the areas adjacent to the Ocmulgee River as defined herein.

Section 5.1 Establishment of Ocmulgee River Corridor Protection District

The Ocmulgee River Corridor Protection Overlay District is hereby designated and shall comprise all land, inclusive of islands, in areas of the Ocmulgee River within Houston County and being within 100 feet horizontally on both sides of the river as measured from the river banks. Also included is the area between the top of the bank and the edge of the river although this strip of land is not included as part of the 100-foot buffer requirement contained in the minimum standards. This district shall be further defined and delineated on the Ocmulgee River Corridor Protection District Overlay Map. The Map is hereby incorporated into and made a part of this ordinance by reference.

Section 5.2 Protection Criteria

Construction within the buffer area is prohibited, except as provided herein.

- A. A natural vegetative buffer shall be maintained at all times in the river corridor, except as otherwise provided herein.
- B. The natural vegetative buffer shall be restored as quickly as possible following any land-disturbing activity.
- C. Septic tank and septic tank drainfields are prohibited in the river corridor, except as expressly provided in Section 5.2 (D) (4) of this ordinance.
- D. Single-family dwellings including the usual appurtenances are permitted in the buffer area subject to the following conditions:
 - 1. The dwelling shall be in compliance with all local zoning regulations.
 - 2. The dwelling shall be located on a tract of land containing at least two acres. For the purposes of these standards, the size of the tract of the land shall not include any area that lies within the protected river, (that is, for tracts of land that include portions of a protected river, the area between the river banks cannot be counted towards the two-acre minimum size).
 - 3. There shall be only one such dwelling on each two-acre or larger tract of land.
 - 4. A septic tank or tanks serving such a dwelling may be located within the buffer area.
 - 5. Septic tank drainfields shall not be located within the buffer area.
- E. Industrial and commercial land uses existing in the river corridor prior to the promulgation of this ordinance are exempt from the criteria contained herein, provided that:
 - 1. These uses do not impair the drinking quality of the river water.
 - 2. These uses meet all state and federal environmental rules and regulations.
- F. The construction of road crossings and utility crossings is permitted in the river corridor, provided such construction meets all requirements of the Erosion and Sedimentation Control Act of 1975, and all applicable local ordinances on soil erosion and sedimentation control.
- G. The following uses are permitted in the river corridor, provided that such uses do not impair the long-term functions of the protected river or the river corridor.
 - 1. Timber production and harvesting, subject to the following conditions:
 - (a.) Forestry activity shall be consistent with best management practices established by the Georgia Forestry Commission; and
 - (b.) Forestry activity shall not impair the drinking quality of the river water as defined by the Federal Clean Water Act, as amended.

2. Wildlife and fisheries management activities consistent with the purposes of O.C. G.A. 12-2-8.
3. Wastewater treatment.
4. Recreational usage consistent either with the maintenance of a natural vegetative buffer or with river-dependent recreation. For example, a boat ramp would be consistent with this criterion, but a hard-surface tennis court would not. Parking lots are not consistent with this criterion. Paths and walkways within the river corridor are consistent with this criterion.
5. Natural water quality treatment or purification.
6. Agricultural production and management, subject to the following conditions:
 - a. Agricultural activity shall be consistent with best management practices established by the Georgia Soil and Water Conservation Commission;
 - b. Agricultural activity shall not impair the drinking quality of the river water as defined by the federal Clean Water Act, as amended; and
 - c. Agricultural activity shall be consistent with all state and federal laws, and all regulations promulgated by the Georgia Department of Agriculture.
7. Other uses permitted by the Department of Natural Resources or under Section 404 of the Clean Water Act.

- H. Handling areas for the receiving and storage of hazardous waste are prohibited within the river corridor.
- I. Hazardous waste or solid waste landfills are prohibited within the river corridor.
- J. The standards and requirements in this ordinance do not supersede those contained in the Metropolitan River Protection Act, the Coastal Marshlands Protection Act, and the Erosion and Sedimentation Act.

Section 5.3 Exemptions

The following uses are exempted from the river corridor protection plan.

- a. Land uses existing prior to the promulgation of the Ocmulgee River Corridor District. For the purposes of this ordinance, a pre-existing use is defined as any land use or land-disturbing activity, including all human endeavors directly associated with such use or activity which, prior to the promulgation of this ordinance, falls within one of the following categories. (See Section 5.2 (E) for additional regulations governing pre-existing industrial and commercial uses.)
 1. Is completed;
 2. Is under construction;
 3. Is fully approved by the governing authority;
 4. All materials have been submitted for approval by the governing authority;
 or

5. Is zoned for such use and expenditures in excess of \$2,500.00 have been made in preparation for construction in accordance with such zoning.
- b. Mining activities, if permitted by the Department of Natural Resources pursuant to the Georgia Surface Mining Act of 1968, as amended.
- c. Utilities (except as discussed above in Section 5.2 (F)), if such utilities cannot feasibly be located outside the buffer area (feasibility shall be decided conservatively by the local government), provided that:
- The utilities shall be located as far from the river bank as reasonably possible;
Installation and maintenance of the utilities shall be such as to protect the integrity of the buffer area as well as is reasonably possible; and
Utilities shall not impair the drinking quality of the river water.
- D. Specific forestry and agricultural activities, except as discussed above in Sections 5.2 (G) (1) and (G) (6) above.

So adopted this 4th day of May 2004.

Attested By: _____
Director of Administration

Chairman