
Water Resources Protection Ordinance

Prepared for

City of Warner Robins

Adopted May 15, 2006
Revised: March 5, 2012

Revision Summary

| Date | Description of Revision | Recommended by |
|-------------------|---------------------------------------|-----------------------|
| 03/05/2012 | Updated Flood Hazard Ordinance | Walter Gray |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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, the City of Warner Robins 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 the City of Warner Robins, 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 City of Warner Robins shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the city engineer may be delegated by the city engineer to persons or entities acting under the authority of the City of Warner Robins.

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. *City*. The City of Warner Robins, Georgia.
5. *City Engineer*. The Warner Robins city engineer or his/her designee.
6. *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.

7. *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.
8. *Critical facility.* A facility that is critical to the health and welfare of the population and that are especially important following hazard events. Critical facilities include essential facilities, transportation systems, lifeline utility systems, high potential loss facilities, and hazardous material facilities. Some examples may hospitals, fire stations, police stations, storage of critical records, and similar facilities.
9. *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.
10. *Day.* A day is defined as a calendar day.
11. *Department.* The Georgia Department of Natural Resources.
12. *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.
13. *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.
14. *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.
15. *Director.* The Director of the Environmental Protection Division of the Department of Natural Resources, State of Georgia.
16. *Division.* The Georgia Environmental Protection Division of the Department of Natural Resources, State of Georgia.
17. *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.
18. *Drainage Plan.* A plan prepared using appropriate and commonly accepted engineering standards which specifies the means for alteration or development of a drainage system.
19. *Drainage Structure.* Any stormwater conveyance structure as defined below, and any piping or ditching for stormwater management purposes.
20. *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.
21. *Erosion.* The process by which land surface is worn away by the action of wind, water, ice or gravity.

22. *Erosion and Sediment Control Plan.* A plan for the control of soil erosion and sediment resulting from land disturbing activity.
23. *Existing Grade.* The vertical location of the existing ground surface prior to cutting or filling.
24. *Filling.* The placement of any soil or other solid material, either organic or inorganic, on a natural ground surface or excavation.
25. *Finished Grade.* The final elevation and contour of the ground after cutting or filling and conforming to the proposed design.
26. *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.
27. *Floodplain.* Any land area susceptible to being inundated by flood waters from any source.
28. *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.
29. *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.
30. *Greenbelt.* An area of land to be dedicated to the City of Warner Robins or a land trust which shall remain undisturbed, insofar as possible, from its natural state to form a screen or buffer.
31. *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.
32. *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 the City.
33. *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).
34. *Illicit Connections.* Any man-made conveyance connecting a discharge directly to a MS4.
35. *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.
36. *Industrial Activity.* Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

37. *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.
38. *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.
39. *Issuing Authority.* The City, 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.
40. *Jurisdictional Wetland.* An area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers.
41. *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.
42. *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.
43. *Licensed Professional.* A professional engineer, architect, landscape architect or surveyor licensed by the State of Georgia.
44. *Live Retention.* That quantity of water capable of being effectively contained by a designated facility for stormwater storage for a specified period of time.
45. *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.
46. *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.
47. *Maintenance of Stormwater Facility.* Preserving the enclosing walls or impounding embankment of the detention/retention facility in good condition; ensuring structural soundness, functional adequacy and freedom from sediment; and rectifying any unforeseen erosion problems.
48. *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.
49. *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.

50. *Natural Ground Surface*. The ground surface in its original state before any grading, excavation or filling.
51. *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.
52. *Non-Stormwater Discharge*. Any discharge to the storm drain system that is not composed entirely of stormwater.
53. *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.³
54. *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.
55. *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.
56. *Permit*. The authorization necessary to conduct a land-disturbing activity under the provisions of this ordinance.
57. *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.
58. *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.
59. *Pollutant*. Any impurity or waste material that degrades the physical, chemical, biological or radiological integrity of surface or subsurface waters.
60. *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.

³ MNGWPD, Adopted Post Construction Stormwater Runoff Ordinance.

61. *Project*. The entire proposed development project regardless of the size of the area of land to be disturbed.
62. *Reach*. A longitudinal segment of a stream or river measured along specified points on the stream or river.
63. *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.⁴
64. *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.
65. *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.
66. *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.
67. *Runoff Coefficient*. The ratio of runoff to rainfall.
68. *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.
69. *Sedimentation*. The action or process of forming or depositing sediment.
70. *Sedimentation Facility*. A facility specifically developed for the purpose of allowing the deposition of sediment resulting from the land development process.
71. *Shear Failure*. Failure of an earthen bank caused by the steepness of the slope.
72. *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.
73. *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

⁴ MNGWPD, Adopted Post Construction Stormwater Runoff Ordinance.

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.

74. *Stormwater*. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation
75. *Stormwater Design Manual*. The Georgia Stormwater Management Manual, current edition, as published by the Atlanta Regional Commission and the City design standards. The Georgia Stormwater Management Manual is available online at www.georgiastormwater.org.
76. *Stormwater Facility*. A facility which provides for storage of stormwater runoff and controlled release of this runoff during and after a flood storm.
77. *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.
78. *Stormwater Runoff*. The portion of a precipitation on the land which reaches the drainage system.
79. *Stream*. Natural, running water flowing continuously or intermittently in a channel on or below the surface of the ground.
80. *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.
81. *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.
82. *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.
83. *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.
84. *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.

85. *Undisturbed Natural Buffer.* A tract of land in its natural undisturbed state where no vegetation can be removed or planted without a City permit. No herbicides, pesticides, or other chemicals, either natural or manmade can be used in this buffer.

86. *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 the City.

87. *Vegetation.* All plant growth.

88. *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.

89. *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.

90. *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 the City 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 the City 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 city engineer as being necessary to protect public health and safety.

- c. Dye testing is an allowable discharge, but requires a verbal notification to the city engineer 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 city engineer 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 city engineer 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 city engineer 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 city engineer 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 city engineer 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 city engineer will notify a violator of the proposed termination of its MS4 access. The violator may petition the city engineer 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 city engineer.

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 city engineer 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 city engineer.
- b. Facility operators shall allow the city engineer 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 city engineer shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the city engineer to conduct monitoring and/or sampling of the facility's stormwater discharge.
- d. The city engineer 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 city engineer and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- f. Unreasonable delays in allowing the city engineer 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 city engineer reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this article.
- g. If the city engineer 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 the City 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

The City 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 the City

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 compliant 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 stormwater flows, either continuously or intermittently, 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 city engineer 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 city engineer within three business days of the phone notice. The notification of the discharge of materials to the city engineer shall be in addition to notification of other applicable City, 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 city engineer finds that a person has violated a prohibition or failed to meet a requirement of this article, the city engineer 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 city engineer to the local Magistrate 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 city engineer then representatives of the city engineer 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 city engineer 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 city engineer 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, the City 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 the maximum criminal penalty provided by law.

The City 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 city engineer 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 city engineer 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 city engineer 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 city engineer.

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 city engineer.

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

The City 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 the City, 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 the City 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

The City 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 or number of lots, and the fee structure shall be established by the Mayor and Council. 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 the City will be received and processed in the manner outlined in the Zoning & Subdivision Ordinance of the City.

2.5. Permit Duration

Permits issued under this section shall be valid from the date of issuance through the date the city engineer 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 city engineer 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 city engineer 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 city engineer 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 city engineer.

3.2. Conditions of Waiver

In instances where one of the conditions above applies, the city engineer 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 city engineer 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 streambank 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 city engineer. 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 city engineer 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 city engineer.

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 the city engineer agree on a greater alternate contribution) established by the Mayor and Council. 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 the City 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 the City 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 city engineer 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 city engineer. 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 city engineer 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 city engineer 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 city engineer 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. NOTE: Here, Houston County added “. 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 licensed in the State of Georgia and/or registered land surveyor licensed in the State of Georgia and 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 licensed professional authorized by state law to certify such plans, 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 city engineer 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 city engineer 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 city engineer must provide a written explanation of the additional elements needed to the applicant.

6.3. Performance Bond/Security

The City 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 the City. 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 licensed professional authorized by state law to certify that the stormwater practice will function in accordance with the approved plan and other applicable provisions of this article. The city engineer 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 city engineer.

6.4. Errors and Omissions Insurance

The City requires 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 the City of Warner Robins. 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 city engineer 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 city engineer.

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 licensed professional authorized by state law to make such certification. A final inspection by the city engineer 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 the City’s 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 city engineer, or his/her 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 city engineer 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.

The City, 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 city engineer, 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 city engineer 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 city engineer 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, the City, 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 city engineer shall notify the party responsible for maintenance of the stormwater management facility in writing. Upon receipt of that notice, the responsible person shall effect maintenance and repair of the facility in an approved manner and within the established deadline. After proper notice, the City 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 the City.

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 city engineer determines that an activity is not being carried out in accordance with the requirements of this article, the city engineer 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 City 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 city engineer 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 city engineer can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this article.

9.4. Civil 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 subject to a civil penalty of two thousand five hundred dollars (\$2,500). Such person shall be subject to such penalty 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, the City 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 city engineer.

ARTICLE V – FLOOD DAMAGE PREVENTION

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

1.1. Statutory Authorization

Article IX, Section II of the Constitution of the State of Georgia and Section 36-1-20(a) of the Official Code of Georgia Annotated have delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the mayor and council of the City of Warner Robins do hereby adopt the following floodplain management regulations.

1.2. Findings of Fact

- a. The flood hazard areas of the City of Warner Robins, 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 occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

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, or which increase flood heights, velocities, or erosion;
- b. Require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction ;
- 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.

Section 2. Definitions

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

- 2.1 Accessory Structure. A structure having minimal value and used for parking, storage and other non-habitable uses, such as garages, carports, storage sheds, pole barns, hay sheds and the like.
- 2.2 Addition (to an existing building). Any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by an independent perimeter load-bearing wall, shall be considered “New Construction”.
- 2.3 Appeal. A request for a review of the City Engineer’s interpretation of any provision of this ordinance.
- 2.4 Area of shallow flooding. The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, Areas of Special Flood Hazard shall be those designated by the local community and referenced in Article 2, Section B. Update Article and Section as appropriate for this ordinance.
- 2.5 Base flood. The flood having a one percent chance of being equaled or exceeded in any given year.
- 2.6 Base Flood Elevation (BFE). The elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.
- 2.7 Basement. That portion of a building having its floor sub grade (below ground level) on all sides.
- 2.8 Building. Any structure built for support, shelter, or enclosure for any occupancy or storage.
- 2.9 Critical Facility. Any public or private facility, which, if flooded, would create an added dimension to the disaster or would increase the hazard to life and health. Critical facilities include:
 - a. Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic, or water-reactive materials;
 - b. Hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood or storm events;
 - c. Emergency operation centers or data storage centers which contain records or services that may become lost or inoperative during flood or storm events; and
 - d. Generating plants, and other principal points of utility lines.

- 2.10 Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, and storage of materials or equipment.
- 2.11 Elevated building. A non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.
- 2.12 Existing construction. For the purposed of determining rates, structures for which the “start of construction” commenced before:
 - a. City of Warner Robins (Community No. 130111): Dec. 1, 1978
 - b. Annexed areas of Houston County (Community No. 130247): June 4, 1990
 - c. Annexed areas of Peach County (Community No. 130373): July 3, 1990
- 2.13 Existing Manufactured Home Park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before construction of streets, and final site grading for the pouring of concrete pads) is completed before :
 - a. City of Warner Robins (Community No. 130111): Dec. 1, 1978
 - b. Annexed areas of Houston County (Community No. 130247): June 4, 1990
 - c. Annexed areas of Peach County (Community No.130373): July 3, 1990
- 2.14 Expansion to an existing manufactured home park or subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.
- 2.15 Flood or Flooding. A general and temporary condition of partial or complete inundation of normally dry areas from:
 - a. The overflow of inland or tidal waters; or
 - b. The unusual and rapid accumulation of runoff of surface waters from any source.
- 2.16 Flood Hazard Boundary map (FHBM). An official map of a community, issued by the Federal insurance Administration, where the boundaries of areas of special flood hazard have been defined as Zone A.
- 2.17 Flood Insurance Rate Map (FIRM). Official map of a community, issued by the Federal Insurance Administration, delineated the areas of special flood hazard and/or risk premium zones applicable to the community.
- 2.18 Flood Insurance Study. Official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.
- 2.19 Floodplain. Any load area susceptible to flooding.

- 2.20 Flood proofing. Any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- 2.21 Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.
- 2.22 Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.
- 2.23 Highest adjacent grade. The highest natural elevation of the ground surface, prior to construction, adjacent to the proposed foundation of a building.
- 2.24 Historic structure. Any structure that is;
- a. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register:
 - b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district:
 - c. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of Interior, or
 - d. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
 - i. By an approved state program as determined by the Secretary of the Interior, or
 - ii. Directly by the Secretary of the Interior in states without approved programs.
- 2.25 Lowest floor. The lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of this code.
- 2.26 Manufactured home. A building, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

- 2.27 Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- 2.28 Mean Sea Level. The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- 2.29 National Geodetic Vertical Datum (NGVD). Corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.
- 2.30 New construction means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced after the effective date of the initial applicable FIRM and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced after the effective date of the FIRST floodplain management ordinance adopted by the community and includes any subsequent improvements to such structures. The initial FIRM dates are described in Section 2.12 above.
- 2.31 New manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed after the effective date of the first applicable floodplain management regulations adopted by a community. The initial FIRM dates are described in Section 2.13 above.
- 2.32 North American Vertical Datum (NAVD). Replaced the National Geodetic Vertical Datum of 1929 in existing and future FEMA Flood Modernization Maps.
- 2.33 Recreational vehicle. A vehicle which is:
- a. built on a single chassis;
 - b. 400 square feet or less when measured at the largest horizontal projection;
 - c. designed to be self-propelled or permanently towable by a light duty truck; and
 - d. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- 2.34 Repetitive Loss. Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.
- 2.35 Start of construction. The date the development permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of the structure such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation, and includes the placement of a

manufactured home on a foundation. (Permanent construction does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and /or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main structure. (NOTE: accessory structures are NOT exempt from any ordinance requirements) For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

- 2.36 Structure. A walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank.
- 2.37 Subdivision. The division of a single lot into two or more lots for the purpose of sale or development.
- 2.38 Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.
- 2.39 Substantial improvement. Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures, which have incurred “repetitive loss” or “substantial damage”, regardless of the actual amount of repair work performed.

For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include (1) those improvements of a structure required to comply with existing violations of state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions and which have been identified by the Code Enforcement Official, and not solely triggered by an improvement or repair project, or (2) any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

- 2.40 Substantially improved existing manufactured home parks or subdivision”. Where the repair, reconstruction, rehabilitation or improvement of the streets, utilities, and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.
- 2.41 Variance. A grant of relief from the requirements of this ordinance, which permits construction in a manner otherwise prohibited by this ordinance.
- 2.42 Violation. The failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without the elevation certificate, or other certifications, or other evidence of compliance required by this ordinance is presumed to be in violation until such time as that documentation is provided.

Section 3. General Provisions

3.1. Lands to Which This Article Applies

This article shall apply to all Areas of Special Flood Hazard as designated by the City within the zoning and building code jurisdiction of the City of Warner Robins, Georgia.

3.2. 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), dated as follows:

- a. Houston County (Community No. 130247): September 28, 2007
- b. Peach County (Community No. 130373): September 26, 2008,

for those community panels located within the corporate limits of the City of Warner Robins, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this article.

For those land areas acquired by a municipality through annexation, the current effective FIS dated September 28, 2007, with accompanying maps and other supporting data and any revision thereto, for Houston County and FIS dated September 26, 2008, with accompanying maps and other supporting data and any revision thereto, for Peach County, are hereby adopted by reference.

Areas of Special Flood Hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in a FIS. Subdivision plats recorded in the Clerk of Superior Court offices of the applicable county will specifically state additional Flood Hazard areas by referencing minimum Finished Flood Elevations.

The Repository for public inspection of the Flood Insurance Study (FIS), accompanying maps and other supporting data is located: City Engineering Office, City of Warner Robins, 700 Watson Boulevard, Warner Robins, GA 31093.

3.3. 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.

3.4. Compliance

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

3.5. Abrogation and Greater Restrictions

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

3.6. 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.

3.7. 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; 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 the City of Warner Robins, 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.

3.8. Penalties for Violation

Failure to comply with the provisions of this ordinance or with any of its requirements, including conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a violation. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than or both, and in addition, be subject to the maximum penalties provided by city ordinance, 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 City of Warner Robins or its agent from taking such other lawful actions as is necessary to prevent or remedy any violation.

Section 4. Administration

4.1. Designation of Flood Damage Prevention Article Administrator

The mayor and council of the City of Warner Robins hereby appoints the city engineer to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Article Administrator, the Floodplain Management Administrator and/or the Administrator.

4.2. Permit Procedures

Application for a Development Permit shall be made to the City Engineer on forms furnished by the community **PRIOR** to any development activities, and may include, but not be limited to the following: plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage facilities.

Specifically, the following information is required:

a. Application Stage

- i. Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
- ii. Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;
- iii. Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria of Section 4.2 b.;
- iv. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development, and;

b. Construction Phase

For all new construction and substantial improvements, the permit holder shall provide to the City Engineer an as-built certification of the regulatory floor elevation or flood-proofing level immediately after the lowest floor or flood proofing is completed. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a professional engineer or a land surveyor and certified by same. When flood proofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

Any work undertaken prior to submission of the certification shall be at the permit holder's risk.

The City Engineer shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop work order for the project.

4.3. Duties and Responsibilities of the Floodplain Management Administrator

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

- a. Review proposed development to assure that the permit requirements of this ordinance have been satisfied.

- b. Review proposed development to assure that all necessary permits have been received from governmental agencies from which approval is required by Federal, State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Require that copies of such permits be provided and maintained on file with the development permit.
- c. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- d. When Base Flood Elevation data or floodway data have not been provided in accordance with Section 3.2, 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.
- e. Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new or substantially improved structures in accordance with Section 4.2.
- f. Review and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with Section 4.2.
- g. When flood-proofing is utilized for a structure, the City Engineer shall obtain certification of design criteria from a registered professional engineer or architect, in accordance with 4.2 a. iii.
- h. Make substantial damage determinations following a flood event or any other event that causes damage to structures in flood hazard areas.
- i. Notify adjacent communities, the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- j. For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to the FEMA to ensure accuracy of community flood maps through the Letter of Map Revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.
- k. 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. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
- l. All records pertaining to the provisions of this ordinance shall be maintained in the office of the city engineer and shall be open for public inspection.

Section 5. Provisions for Flood Hazard Reduction

5.1. General Standards

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

- a. New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- b. New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- c. New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
- d. Elevated Buildings – All New construction or substantial improvements of existing structures that include ANY fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.
 1. Designs for complying with the is requirement must either be certified by a professional engineer or 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 grade; and,
 - iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both direction.
 2. So as not to violate the “Lowest Floor” criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area, and
 3. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
- e. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, 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. 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.

- g. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- h. 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;
- i. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding, and;
- j. Any alteration, repair, reconstruction or improvements to a structure, which is not compliant with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

5.2. SPECIFIC STANDARDS

In ALL Areas of Special Flood Hazard the following provisions are required:

- a. **New construction and /or substantial improvements.** Where base flood elevation data are available, new construction and/or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than **eighteen inches (18’)** above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with standards of Section 5, 5.1 d, “Elevated Buildings”.
 - a. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated at or above **eighteen inches (18’)** above the base flood elevation.
- b. **Non-Residential Construction.** New construction and/or substantial improvement of any structure located in A1-A30, AE, or AH zones, may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water right to **eighteen inches** above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability fo resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in Section 4, 4.3 f.
- c. **Standards for Manufactured Homes and Recreational Vehicles.** Where base flood elevation data are available.
 - 1. All manufactured homes placed, or substantially improved, on: (1) individual lots or parcels, (2) in new and/or substantially improved manufactured home parks or subdivisions, (3) in expansions to existing manufactured home parks or subdivisions, or (4) on a site in an existing manufactured home park or subdivision where a manufactured home has incurred “substantial damage” as the

result of a flood, must have the lowest floor including basement, elevated no lower than ***eighteen inches (18”)*** above the base flood elevation.

2. Manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that either:
 - (i) The lowest floor of the manufactured home is elevated no lower than **18 inches** above the level of the base flood elevation, or
 - (ii) The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.
 3. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (Ref. Section 5, 5.1, f above)
 4. All recreational vehicles placed on sites must either:
 - (i)) Be on the site for fewer than 180 consecutive days.
 - (ii) Be fully licensed and ready for highway use, (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions); or
 - (iii)The recreational vehicle must meet all the requirements for “New Construction”, including the anchoring and elevation requirements Section 5, 5.2, c (1)(3), above; or
- d. **Floodway** – Located within Areas of Special Flood Hazard established in Section 3, 3.2, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:
1. Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the encroachment shall not result in **any** increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.
 2. **ONLY** if Section 5, 5.2, d, 1 above is satisfied, than any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Section 5.

5.3. BUILDING STANDARDS FOR STREAMS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS AND/OR FLOODWAY (A-ZONES)

Located within the Areas of Special Flood Hazard established in Section 3, 3.2, where streams exist but no base flood data have been provided (A-Zones), OR where base flood data have been provided but a Floodway has not been delineated, the following provisions apply:

- a. When base flood elevation data or floodway data have not been provided in accordance with Section 3, 3.2, then the City Engineer shall obtain, review, and reasonable utilize any scientific or historic base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 5. ONLY if data are not available from these sources, then the following provisions (b&c) shall apply:
- b. No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in more than a **one foot** increase in flood levels during the occurrence of the base flood discharge.
- c. In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than **three feet** above the highest adjacent grade at the building site. (NOTE:) Require the lowest floor to be elevated eighteen inches above the estimated base flood elevation in A-Zone areas where a Limited detail study has been completed). Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Section 5, 5.1, d “Elevated Buildings”.
 - i. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated no less than **three feet** above the highest adjacent grade at the building site.

The City Engineer shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

5.4. STANDARDS FOR AREAS OF SPECIAL FLOOD HAZARD (ZONES AE) WITH ESTABLISHED BASE FLOOD ELEVATIONS WITHOUT DESIGNATED FLOODWAYS

Located within the Areas of Special Flood Hazard established in Section 3, 3.2, where streams with base flood elevations are provided but no floodways have been designated, (Zones AE) the following provisions apply:

- a. No encroachments, including fill material, new structures or substantial improvements shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

- b. New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevations established in accordance with Section 5, 5.1.

5.5. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO ZONES)

Areas of Special Flood Hazard established in Section 3, 3.2, may include designated “AO” shallow flooding areas. These areas have base flood depths of one to three feet above ground, with no clearly defined channel. The following provisions apply:

- a. All new construction and substantial improvements of residential and non-residential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 5, 5.1 (d), “Elevated Buildings”.

The City Engineer shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

- b. New construction or the substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus eighteen inches (18”), above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in Section 4, 4.2, a, iii and 4.2, b.
- c. Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

5.6. STANDARDS FOR SUBDIVISION

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- b. All subdivision and/or development 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 and/or development proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- d. For subdivisions and/or developments greater than fifty lots or five acres, whichever is less, base flood elevation data shall be provided for subdivision and all other proposed development, including manufactured home parks and subdivisions. Any changes or revisions to the flood data adopted herein and shown on the FIRM shall be submitted to FEMA for review as a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Amendment (CLOMA), whichever is applicable. Upon completion of the

project, the developer is responsible for submitting the “as-build” data to FEMA in order to obtain the final LOMR.

5.7. STANDARDS FOR CRITICAL FACILITY

- a. Critical facilities shall not be located in the 100-year floodplain or the 500-year floodplain.
- b. All ingress and egress from any critical facility must be protected to the 500-year flood elevation.

SECTION 6. VARIANCE PROCEDURES

- a. The City Council (council) as established by the City of Warner Robins shall hear and decide request or variance from the requirements of this ordinance.
- b. The council shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the City Engineer in the enforcement or administration of this ordinance.
- c. Any person aggrieved by the decision of City Council may appeal such decision to the Superior Court of Houston County, as provided in Section 5-4-1 of the Official Code of Georgia Annotated
- d. 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.
- e. Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Ordinance are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.
- f. Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.
- g. In reviewing such request, City Council shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.

6.1 Conditions for Variance:

- a. A variance shall be issued ONLY when there is:
 - i. A finding of good and sufficient cause,
 - ii. A determination that failure to grant the variance would result in exceptional hardship, and;
 - iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

- b. The provisions of this Ordinance are minimum standards for flood loss reduction; therefore any deviation from the standards must be weighted carefully. 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 a Historic Structure,” a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
- 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 of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- d. The City Engineer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- e. Upon consideration of the factors listed above and the purposes of this ordinance, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

SECTION 7 SEVERABILITY

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

Ordinance adopted on _____.

BY: _____

Certified by: _____

Date: _____