AMENDING CHAPTER 30 (LDO)
AN ORDINANCE AMENDING THE GREENSBORO CODE OF ORDINANCES
WITH RESPECT TO ZONING, PLANNING AND DEVELOPMENT

(Editors Note: Added text shown with underlines and deleted text shown with strikethroughs.)

Section 1. That the entire content of Section 30-12-3, Water Supply Watershed and Other Watershed Districts, is hereby deleted in its entirety and amended to read as follows:

30-12-3 Water Supply Watershed and Other Watershed Districts

30-12-3.1 District Descriptions
Two overlay districts cover designated water supply watersheds. They are the Watershed Critical Area (WCA) and the General Watershed Area (GWA). The WCA covers the area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. WCA outer boundaries are at least one-half mile from the normal pool elevation of an existing or proposed designated reservoir. The GWA covers the rest of the watershed draining to the reservoir or intake. The remaining areas within the City's jurisdiction are hereby referred to as Other Watershed Districts.

30-12-3.2 Purpose and Intent

(A) General Intent
The watershed protection regulations, adopted and prescribed in this Ordinance, to protect the public health; are found by the City Council to be necessary and appropriate to:

1) Protect stream buffers, water supply watersheds, and other watersheds from activities that could degrade water quality in the reservoirs and streams;

2) Reduce the volume of nutrients and other chemicals that could enter streams and the water supply by reducing the amount of runoff that any given development will generate;

3) Minimize land disturbance to reduce the amount of sediment washing into streams and lakes and to enhance the infiltration of runoff into soils, thus alleviating the sedimentation of water supply lakes that reduces their storage capacity, shortens their useful life, and makes them less able to withstand drought;

4) Reduce the probability of the release of harmful chemicals into streams and water supply reservoirs, either through natural catastrophe or human error;

5) Provide for natural and engineered methods for managing the stormwater that flushes contaminants off of built-up areas in the water supply watersheds and other watersheds that may reach water supply reservoirs and streams unless controlled.

6) To require that new development maintain the pre-development hydrologic response in its post-development state as nearly as practicable for the applicable design storm to reduce flooding, streambank erosion, nonpoint and point source pollution and increases in stream temperature, and to maintain the integrity of stream channels and aquatic habitats; and

7) To establish provisions for the long-term responsibility for and maintenance of structural and nonstructural stormwater Best Management Practices (BMPs) to ensure that they continue to function as designed, are maintained appropriately, and pose no threat to public safety.

(B) WCA- Watershed Critical Area
The WCA, Watershed Critical Area overlay district establishes regulations for protecting the portion of a water supply watershed adjacent to a water supply intake or reservoir.
(C) GWA- General Watershed Area

The GWA, General Watershed Area overlay district establishes regulations for protecting the portion of a water supply watershed outside the WCA.

30-12-3.3 Incorporation of Designated Watershed Map(s)

This section incorporates by reference the Greensboro Designated Watershed Map, dated June 1, 2009, showing Watershed Critical Areas and General Watershed Areas of the following: Greensboro (Reedy Fork Creek), Upper Randleman Lake (East and West Forks of Deep River, which drain to High Point City Lake and Oak Hollow Lake), Lower Randleman Lake (Deep River), Lake Mackintosh (Big Alamance Creek), and Polecat Creek watersheds. The map also depicts boundaries of the Other Watershed Districts.

30-12-3.4 Applicability

(A) Coverage

1) This section (Section 30-12-3) applies to all sites containing new development in the city's jurisdiction, including grading, paving, gravel placement, and construction of buildings and other structures, except for the exempt activities listed in Section 30-12-3.4(B). Section 30-12-5 and Section 30-12-4 impose additional requirements specific to the overlay district. Section 30-12-3.9 applies to all activities in the city's jurisdiction.

2) The construction of new streets by local government, widening of existing streets and the installation of sidewalks shall comply with the provisions of this Article to the extent practicable. When it is determined by the Director of Water Resources that the provisions of these sections cannot be met, the construction of new streets, the widening of existing streets and the installation of sidewalks shall comply with all applicable State and Federal rules and regulations.

(B) Exempt Activities

The following activities are exempt from the plan submission and approval requirements of this section. However, any restrictions upon building location, drainageways, pavement, or other built-upon area, or any other matter appearing on any previously approved watershed development (watershed control) or stormwater management plan covering the subject property, shall be complied with unless and until replaced by an approved revised plan.

1) Construction of a single-family dwelling and its accessory structures on a lot of record created outside WCA Tiers 1 and 2 prior to July 1, 1993.

2) Replacement of existing built-upon area with a like or lesser amount of new built-upon area outside any required stream buffer on the same lot, provided that the Director of Water Resources has determined that equal or improved stormwater management will result.

3) Except as provided in subsection (1) above, placement of small accessory buildings or structures or small amounts of other built-upon area provided that the total additional built-upon area is no greater than 400 square feet and the additional built-upon area is not placed within a required stream buffer. This exemption shall apply to a lot for one time only after June 30, 1993.

4) Existing development until such time as new development is initiated on the site.

5) Activities exempt from permit requirements of Section 404 of the Federal Clean Water Act, as specified in 40 CFR 232 are exempt from watershed requirements of this ordinance. Stream buffer requirements for ongoing farming and forestry activities will be implemented and enforced by the Division of Water Quality.

(C) Modifications

The provisions of this Section are eligible for Modification in accordance with Section 30-4-11. The evaluation of requests for modifications of watershed regulations involves both technical evaluations
(normally conducted by the Enforcement Officer and the Technical Review Committee) and evaluations made in light of both water supply watershed protection policies and fundamental fairness (normally conducted by the Planning Board and City Council). The approval procedure shall be as follows:

1) Watershed Modification that is minor in nature. Modification of the watershed regulations Sec. 30-12-3, Sec. 30-12-4 or Sec. 30-12-5 that meets one of the following criteria: (A) Modification of any standard present in Article XII of this ordinance but not in the EMC Rules; (B) Modification of any standard on which the level of performance required by Article XII exceeds that required by the corresponding section of the EMC Rules, provided that approval of the modification does not lower the level of performance below that required by the EMC Rules; or (C) Modification from the EMC Rules that results in a relaxation, by a factor of up to 5%, of density, or built-up area requirement under the high-density option; or that results in a relaxation, by a factor of up to 10%, of any management requirement under the low-density option, shall be considered minor in nature.

   a) For properties located within General Watershed Areas (GWA) and Watershed Critical Areas (WCA), the Technical Review Committee may grant a Type 2 modification to allow the treatment of untreated off-site runoff in exchange for not treating up to 5% of built-up area but not to exceed 24,000 square feet of on-site runoff that is considered difficult to control in accordance with Sec. 30-4-11. This percentage is based on total on-site BUA vs. BUA not treated by a BMP.

   b) For properties located within General Watershed Areas (GWA), the Planning Board may grant a Type 3 Modification to the Standards of watershed regulations in accordance with Sec. 30-4-11.

   c) For properties located within the Watershed Critical Areas (WCA), the City Council may grant a Type 4 Modification to the Standards of the watershed regulations in accordance with Sec. 30-4-11.

2) Watershed Modification that is major in nature. Modification of the watershed regulations of Sec. 30-12-3, Sec. 30-12-4 or Sec. 30-12-5 that do not meet those described in Subsection (1) above are considered major in nature. Recognizing that these types of modifications are only approvable in unique circumstances on a case-by-case basis by the NC Environmental Management Commission (EMC) pursuant to Section 0104(r) of the EMC Rules, the EMC may grant a Type 5 Modification to the Standards of the watershed regulations in accordance with Sec. 30-4-11. Any modification of Section 30-12-3.9 is considered a Type 5 modification.

   a) A Type 5 modification request pertains to activities that will impact any portion of Zone 1 or any portion of both Zones 1 and 2 of the riparian protection area. If the City of Greensboro has determined that a Type 5 modification request meets the requirements of this section, then it shall prepare a preliminary finding and submit it to the NC Environmental Management Commission for approval. Within 90 days after receipt by the City of Greensboro, the Commission shall review preliminary findings on the Type 5 request and take one of the following actions: approve, approve with conditions and stipulations, or deny the request.

   b) Appeals from a NC Environmental Management Commission decision on a Type 5 modification request are made on judicial review to Superior Court.

30-12-3.5 Participation in a Public Regional Stormwater Control Program

(A) Where Permitted

Where a regional stormwater control program has been established by one or more local governments, or by an authority operating on behalf of one or more local governments, a development may participate in that
regional program in lieu of any certification of runoff control required by this article, provided that all of the following conditions are met:

1) Stormwater runoff from the development drains to an approved existing or proposed public regional stormwater control facility that is currently operational or will be operational within 2 years;

2) Participation is in the form of contribution of funds, contribution of land, contribution of stormwater management facility construction work, or a combination of these, the total value of which must be in accordance with a fee schedule adopted by the City Council; and

3) The Technical Review Committee finds that the stormwater management plan is in compliance with all other applicable requirements of this section.

(B) Use of Contributions
Each contribution from a development participating in a regional stormwater control program must be used for acquisition, design, construction or maintenance of one or more such controls in the same watershed in which the development is located.

30-12-3.6 Watershed Development Plan

(A) Plan Required

1) For a two-family dwelling on a zone lot, a plot plan showing all proposed built-upon area, not to exceed 3,000 square feet, shall suffice in a GWA or WCA.

2) For all other new development in a GWA or Other Watershed Districts, a watershed development plan in accordance with the performance standards specified in Section 30-12-3 and with other requirements of Section 30-12-3 and Section 30-12-5 shall be submitted.

3) For all other new development in a WCA, a watershed development plan in accordance with the performance standards specified in Section 30-12-3 and with other requirements of Section 30-12-4 shall be submitted.

4) Plans shall include all applicable information listed in the application as published and amended by the Director of Water Resources.

(B) Plan Approval
The Technical Review Committee is authorized to approve watershed development plans which conform to the requirements of this section.

(C) Approved Plan a Prerequisite
The Engineering and Inspections Director is not authorized to issue any permits, except as provided in Section 30-4-26.1(P)(1) and grading permits as provided in Section 30-4-26.2, for development on any land in a WCA, GWA, or Other Watershed Districts until a watershed development plan in compliance with the requirements of this section has been approved.

(D) Permanent Engineered Stormwater Controls
When a permanent engineered stormwater control is required for a development to meet the requirements of this Article, a North Carolina registered professional engineer shall prepare the plan with the Engineer’s Certification of Stormwater Quality Control from Section 30-4-15.6(C)(4)(a) affixed, signed, sealed, and dated in accordance with the requirements in the City of Greensboro’s Stormwater Management Manual (SWMM). An operation and maintenance plan for the permanent engineered stormwater control shall be submitted with the watershed development plan.

30-12-3.7 Improvements
(A) Design of Improvements

1) Design of improvements shall:
   a) Be performed by a North Carolina registered professional engineer;
   b) Be subject to approval by the Director of Water Resources;
   c) Meet or exceed the guidelines in the Stormwater Management Manual;
   d) Provide a drainage maintenance and utility easement (DMUE) over and 15 feet around the stormwater device to ensure adequate access for maintenance; and
   e) If a stormwater device is located within a subdivision, the DMUE shall be located within the boundaries of the common elements.

2) The Director of Water Resources may recommend, and the Technical Review Committee may require, that a given engineered stormwater control be positioned on a site such that water quality protection is improved.

(B) Construction of Watershed Protection Improvements

1) See Section 30-13-5.4 if improvements are pursuant to a watershed development plan that was a prerequisite to a subdivision approval.

2) The construction of all improvements designed for watershed protection and shown on other approved watershed development plans shall be certified, completed, full design volume available, and functioning properly prior to any pond plat recordation or issuance of any building certificate of occupancy. Alternatively, the Director of Water Resources may issue a temporary certificate of compliance if the structure has not been completed when assurance of its completion within one year is provided in accordance with Sec. 30-4-20 (Sureties or Improvement Guarantees)

3) Completion of Improvements
   a) For Single Family and Town House Subdivisions, final approval of installed engineered stormwater controls shall be required at finalization of the grading permit or upon issuance of 90% of the total number of building certificates of occupancy of lots in the platted subdivision, whichever comes later. If neither a building permit nor a grading permit is required for a site, then any such engineered stormwater control shall be substantially completed and have full design volume available prior to installation of any built-upon area on the site. An Engineer's Certification of Stormwater Control Completion (Section30-4-15.6(C) (5)) shall be required prior to final approval by the Director of Water Resources.

   b) For all others, final approval of installed engineered stormwater controls shall be required at finalization of the grading permit or at issuance of building certificate of occupancy, whichever comes later. If neither a building permit nor a grading permit is required for a site, then any such engineered stormwater control shall be substantially completed and have full design volume available prior to installation of any built-upon area on the site. An Engineer's Certification of Stormwater Control Completion (Section30-4-15.6(C) (5)) shall be required prior to final approval by the Director of Water Resources.

4) A final inspection and approval by the Director of Water Resources shall occur before the release of any performance securities.

5) The certification requirements of this section also apply for those projects utilizing a structural best management practice.
(C) Recordation of Permanent Improvements

1) All permanent engineered stormwater control, associated access/maintenance easement(s) (specific or general, at the owner's option) and engineer's certification of stormwater control completion shall be recorded on a Pond Plat.

2) A mechanism to ensure their proper operation and maintenance shall be established and recorded in the Office of the County Register of Deeds concurrent with or prior to plat recordation and prior to the issuance of the final building certificate of occupancy.

3) A mechanism to ensure that future development and redevelopment shall maintain the site consistent with the approval project plan(s) shall be established and recorded in the Office of the County Register of Deeds concurrent with or prior to plat recordation.

(D) Maintenance Responsibility

1) When engineered stormwater controls serve more than 2 lots, an owners' association shall be required. When 2 or fewer lots are served by engineered stormwater controls or regional stormwater controls a maintenance agreement shall be required. See Section 30-13-5.5 and Section 30-13-9.1.

2) Maintenance of engineered stormwater controls shall be performed at such time as the designated sediment storage volume of the structure has been lost to sediment or a part of the installation is not functioning as originally designed. The Director of Water Resources shall have the responsibility to inspect or require to be inspected by a qualified individual such structures annually, and to notify the responsible property owner or owners' association when maintenance or repairs are required. All required repairs and maintenance shall be performed within 90 days after such notice. In case of failure by the responsible party to perform the required maintenance or repairs within the stated period, the City may perform such maintenance or repairs and recover all costs attendant thereto from the property owner or owners' association. In addition, the City may assess penalties for violations of this section as set out in Article 5: Enforcement.

(E) As-Built Plans

The applicant shall submit the following:

1) Prior to the issuance of any certificate of occupancy the applicant shall submit under seal actual as-built plans for all stormwater conveyances. The plans shall show the final design specifications for all stormwater conveyances with the field location, size, depth, controls, and devices, as installed. This shall include plan view drawings showing all public and private storm drainage piping twelve (12) inches or larger in diameter with associated invert elevation data.

2) Upon completion of the structural best management practices and before a final certificate of occupancy is granted, the applicant shall submit under seal as-built plans for the structural best management practice.

30-12-3.8 Clustering

(A) Clustering Encouraged

Clustering of residential development is encouraged. Clustering of single-family detached development is allowed under the provisions of Section 30-7-3.3. Multi-family development may be clustered so long as the development complies with the standards of Section 30-8-10.

(B) Performance Requirements

Clustering is allowed if the overall density of the project meets the applicable GWA or WCA density and stormwater runoff control requirements, the built-upon areas are designed and sited to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow, and the remainder of the tract remains in a vegetated or natural state.
(C) Additional Requirements in all Watersheds

1) Development shall maximize the use of diffuse flow through vegetated areas and shall maximize the flow length through vegetated areas.

2) Areas of concentrated development shall be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways.

3) In the Randleman Watershed, the remainder of the tract to remain in a vegetated or natural state shall be conveyed to an owners' association, conveyed to a local government for preservation as a park or greenway, conveyed to a conservation organization, or placed in a permanent conservation or farmland preservation easement. A document recorded at the Register of Deeds shall require maintenance of the vegetated or natural area.

4) To the extent that this can be accomplished consistent with other requirements of this ordinance, built-upon area shall be minimized to the maximum extent practical through clustering and narrower and shorter paved areas (streets, driveways, sidewalks, and parking lots). Rooftop and other built-upon area runoff shall be spread over pervious areas.

5) Land clearing during the construction process shall be limited to the maximum extent practical.

6) The developer shall record deed restrictions and protective covenants to ensure that development activities maintain the development consistent with the approved plans and specifications.

30-12-3.9 Stream Buffer Required

(A) Stream Buffer Widths
Throughout the City's jurisdiction stream buffers containing zones and widths as specified in the Stream Buffer Zone and Width Requirements in Table 12-4 shall be maintained. (See Section 30-12-4 for additional requirements concerning stream buffers in the WCA).

(B) Vegetated Conveyances
When the low-density option is used, stormwater runoff shall be transported primarily by vegetated conveyances. Diffuse flow shall be maintained in the stream buffers.

(C) Stream Disturbance
Approval from the Technical Review Committee, NC Division of Water Quality, and U.S. Army Corps of Engineers shall be secured before any intermittent or perennial stream is disturbed. Additionally, if the stream is in a WCA, it shall not be channelized without prior approval of a Type 3 modification by the Planning Board in accordance with Section 30-4-11. Evaluation of the channelization request shall be based on grounds for a modification and mitigation may be required.

(D) Platting of Stream Buffers
Subdivision plats and pond plats shall show each stream buffer and zone applicable to the property.

(E) Diffuse Flow Requirement
In all watersheds, diffuse flow of runoff shall be maintained in the stream buffer by dispersing concentrated flow prior to its entry into the buffer and reestablishing vegetation as follows:

1) Concentrated runoff from new ditches or man-made conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone 2 of the riparian protection area.

2) Periodic corrective action to restore diffuse flow shall be taken by the landowner if necessary to impede the formation of erosion gullies; and
3) As set out in Section 30-12-3.9(F) and Table 12-5 of this Ordinance, the zones of the stream buffer and Table of Stream Buffer Activities and Structures respectively, no new stormwater conveyances are allowed through the buffers except for those specified in the Table 12-5, addressing stormwater management ponds, drainage ditches, roadside ditches, and stormwater conveyances.

(F) Explanation of Stream Buffer Zones

Perennial and intermittent stream buffers must be composed of 2 or 3 of the following zones, depending upon whether the low-density option or the high-density option is used.

1) Zone 1 is the portion of a riparian protection area located closest to the stream, lake, reservoir, or pond. It is intended to be an undisturbed area of vegetation except for activities and structures provided for in Table 12-5 Stream Buffer Activities and Structures in all Watersheds (Section 30-12-3.9(G)(3)) of this Ordinance. The location of Zone 1 shall be as follows:

a) For intermittent and perennial streams, Zone 1 shall begin at the top of the bank and extend landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to a vertical line marking the top of the bank. For ponds, lakes and reservoirs located within a natural drainage way, Zone 1 shall begin at the normal water level and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to a vertical line marking the normal water level. No new built-upon area is to be placed in this zone.

2) Zone 2, the remainder of a riparian protection area, is intended to provide protection through a vegetated riparian zone which provides for diffusion and infiltration of runoff and filtering of pollutants. Zone 2 shall consist of a stable, vegetated area that is undisturbed except for activities and structures provided for in 12-5 Stream Buffer Activities and Structures Allowed on all Watersheds (Section 30-12-3.9(G)(3)) of this Ordinance. Grading and revegetating in Zone 2 is allowed provided that the health of the vegetation in Zone 1 is not compromised. Zone 2 shall begin at the outer edge of Zone 1 and extend landward 20 feet as measured horizontally on a line perpendicular to the surface water. The combined width of Zone 1 and 2 shall be 50 feet on all sides of the surface water. No new built-upon area is to be placed in this zone.

3) Zone 3 is not part of a riparian protection area and therefore is subject to less extensive requirements than Zones 1 and 2. Zone 3 covers the outermost 50 feet of the 100-foot perennial stream buffer under the high-density option. No new built-upon area is to be placed in this zone. (See Section 30-12-4 for additional requirements concerning stream buffers in the WCA)

Table 12-4
Low Density Stream Buffer Width [1] Requirements

<table>
<thead>
<tr>
<th>Watershed District</th>
<th>Perennial Streams, Lakes &amp; Ponds</th>
<th>Intermittent Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zone 1</td>
<td>Zone 2</td>
</tr>
<tr>
<td>All Watershed</td>
<td>0-30</td>
<td>30-50</td>
</tr>
<tr>
<td>Districts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

High-Density Option

<table>
<thead>
<tr>
<th>Watershed District</th>
<th>Perennial Streams, Lakes &amp; Ponds</th>
<th>Intermittent Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zone 1</td>
<td>Zone 2</td>
</tr>
<tr>
<td>All GWA &amp; WCA</td>
<td>0-30</td>
<td>30-50</td>
</tr>
<tr>
<td>Other Watershed</td>
<td>0-30</td>
<td>30-50</td>
</tr>
<tr>
<td>Districts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Distances on all sides of water bodies are in feet and are with reference to top of bank for streams and normal water level for all other water bodies. Thus, '0' equals top of bank or normal water level and '30' equals 30 feet landward from top of bank or normal water level.

HOW TO MEASURE STREAM BUFFERS

ZONE 3
50' Vegetated Buffer (High Density)

ZONE 2
20' Riparian Buffer

ZONE 1
30' Undisturbed Buffer

ZONE 1
30' Undisturbed Buffer

ZONE 2
20' Riparian Buffer

ZONE 3
50' Vegetated Buffer (High Density)

Measure from top of stream bank

(G) Associated Requirements

1) Approval for New Development
   The City of Greensboro shall issue an approval for new development only if the development application proposes to avoid impacts to stream buffers defined in this Ordinance, or if the application proposes to impact such a buffer, and it demonstrates that the applicant has done the following as applicable:
   a) Determined that the activity is allowable in accordance with the requirements of this ordinance.
   b) Received a Determination of No Practical Alternative from the City according to Section 30-4-26.11.
   c) Received approval of a mitigation plan. Activities and Structures designated as Allowable with Mitigation in Table 12-5 require a mitigation plan. The Mitigation plan must be prepared pursuant to Section 30-12-3.9(G)(5).
   d) Received a Type S Modification pursuant to Sections 30-4-11.3(D), 30-4-11.7 and 30-12-3.4(C)(2).

2) Requirements for Categories of Activities and Structures in Stream Buffers
   Activities and structures designated in Table 12-5 of this Ordinance as allowable, allowable with restrictions, and allowable with mitigation within a riparian protection area shall have the following requirements:
   a) Allowable: activities and structures designated as allowable are permissible provided that they adhere to the limitations of the activity as defined in Table 12-5. In addition, allowable structures and activities shall be designed, constructed and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities.
   b) Allowable with Restrictions: activities and structures designated as allowable with restrictions may proceed provided that there are no practical alternatives to the requested use pursuant to Section 30-4-26.11 of this Ordinance. This includes construction, monitoring, and maintenance activities.
   c) Allowable with Mitigation: activities and structures designated as allowable with mitigation may proceed provided that there are no practical alternatives to the requested use pursuant to
Section 30-4-26.11 of this Ordinance and an appropriate mitigation strategy has been approved pursuant to Section 30-12-3.9(G)(5). These activities and structures require the issuance of a No Practical Alternative Determination from the City of Greensboro.

### Table 12-5
Table of Activities and Structures in Stream Buffers (Zone 1 and Zone 2)

The following chart sets out potential new activities and structures within the buffer and categorizes them as allowable, allowable with restrictions, or allowable with mitigation. All activities and structures not categorized as allowable, allowable with restrictions, or allowable with mitigation are considered prohibited and may not proceed within the riparian protection area if the use would impact the buffer.

<table>
<thead>
<tr>
<th>Activities and Structures in Stream Buffers</th>
<th>Allowable</th>
<th>Allowable with Restriction</th>
<th>Allowable with Mitigation</th>
</tr>
</thead>
</table>
| Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities where no built-upon area is added to the buffer:  
  • Such trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, provided that neither installation nor use results in removal of trees  
  • Such trails that exceed 4 feet in width of buffer disturbance  
  • Other such trails that result in removal of trees | X | | X |
| Airport facilities:  
  • Airport facilities that disturb not more than 150 linear feet and not more than one-third of an acre of riparian protection area  
  • Other airport facilities  
  • Activities necessary to comply with FAA requirements (e.g., radar uses or landing strips) | | | X |
| Archaeological activities in Zones 1 and 2  
  • Designed, constructed and maintained to provide the maximum sediment removal and erosion protection, to have the least adverse effects on aquatic life and habitat, and to protect water quality to the maximum extent practical. | X | | |
| Bridges | | X | |
| Canoe access, provided that neither installation nor use results in removal of trees and that no built-upon area is added in the buffer. | X | | |
| Dam maintenance activities:  
  • Dam maintenance activities that either do not cause additional buffer disturbance beyond the footprint of the existing dam or are covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3  
  • Other dam maintenance activities | X | | X |
<table>
<thead>
<tr>
<th>Activities and Structures in Stream Buffer</th>
<th>Allowable</th>
<th>Allowable with Restrictions</th>
<th>Allowable with Best Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage ditches, roadside ditches and stormwater conveyances within riparian protection area:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• New stormwater flows to existing drainage ditches, roadside ditches, and stormwater conveyances provided flows do not alter or result in the need to alter the conveyance and are managed to minimize the sediment, nutrients and other pollution conveyed to water bodies</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>• Realignment of existing roadside drainage ditches retaining the design dimensions, where no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• New or altered drainage ditches, roadside ditches and stormwater outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian protection area</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• New drainage ditches, roadside ditches and stormwater conveyances applicable to linear projects that do not provide a stormwater management facility due to topography constraints, provided that other practicable BMPs are employed</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Driveway crossings of streams and other surface waters subject to this ordinance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Located on single family residential lots and disturbing no more than 25 linear feet and no more than 2,500 square feet of riparian protection area</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Located on single family residential lots and disturbing more</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• Any other development cumulatively disturbing no more than 150 linear feet and no more than one-third of an acre of riparian protection area</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• Any other development cumulatively disturbing more</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Activity or Condition in Stream Buffers</td>
<td>Allowable</td>
<td>Allowable with RDP Restrictions</td>
<td>Allowable with Mitigation</td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td>Driveway encroaching into the buffer but not crossing the stream or other water body</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fences provided that disturbance is minimized and installation does not result in removal of trees</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Fences provided that disturbance is minimized and installation results in removal of trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertilizer application, one time application to establish vegetation provided the manufacturer's recommended rate is not exceeded</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grading and revegetation in Zone 2 only provided that diffuse flow and the health of existing vegetation in Zone 1 is not compromised and disturbed areas are stabilized with native vegetation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenway / hiking trails, provided they are designed, constructed and maintained to provide the maximum nutrient removal and erosion protection, to have the least adverse effects on aquatic life and habitat, and to protect water quality to the maximum extent practical</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Historic preservation designed, constructed and maintained to provide the maximum nutrient removal and erosion protection, to have the least adverse effects on aquatic life and habitat, and to protect water quality to the maximum extent practical</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance access on modified natural streams; a grassed travel way on one side of the water body when less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mining activities that are covered by the Mining Act, where new riparian protection areas that meet the requirements of this ordinance are established adjacent to the relocated channels</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mining activities that are not covered by the Mining Act</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mining activities where new riparian protection areas that meet the requirements of this ordinance are not established adjacent to the relocated channels</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Wastewater or mining dewatering wells with approved NPDES permit</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playground equipment:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Playground equipment on single family lots if installation and use does not result in removal of vegetation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playground equipment installed on lands other than single family lots or that requires removal of vegetation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities and Structures to Stream Banks</td>
<td>Allowable</td>
<td>Allowable with Restrictions</td>
<td>Allowable with Mitigation</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------</td>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Ponds created by impounding streams and not used as stormwater BMPs</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>• New ponds where a riparian protection area is established adjacent to the pond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• New ponds where a riparian protection area is not established adjacent to the pond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian protection area or the stream channel</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Railroad activities and structures other than crossings of streams and other surface waters subject to this ordinance</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Railroad crossings of streams and other surface waters subject to this ordinance:</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Those impacting no more than 40 linear feet of riparian protection area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Those impacting more than 150 linear feet and not more than one-third of an acre of riparian protection area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Those impacting more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreational and accessory structures in Zone 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sheds and gazebos with:</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>o Total footprint not more than 150 square feet per lot</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>o Greater footprint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Wooden slatted decks and associated steps with:</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>o Deck at least 8 feet in height and no vegetation removed from Zone 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Deck less than 8 feet in height or vegetation removed from Zone 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal of fill or debris, provided that diffuse flow is maintained and vegetation is restored</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Scientific studies and stream gauging in Zones 1 and 2 if they are designed, constructed and maintained to protect water quality to the maximum extent practical</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Stormwater BMPs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Wet detention, bioretention, and constructed wetlands in Zone 2 if diffuse flow of discharge is provided into Zone 1</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>• Wet detention, bioretention, and constructed wetlands in Zone 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streambank stabilization</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Activities and Structures in Stream Barriers</td>
<td>Allowable</td>
<td>Allowable with Restrictions</td>
<td>Allowable with Mitigation</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------</td>
<td>----------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Street crossings of streams and other surface waters subject to this ordinance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Impacting no more than 40 linear feet of riparian protection area</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Crossings impacting more than 40 linear feet but not more than 150 linear feet and no more than one-third of an acre of riparian protection area</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• Crossings that impact more</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Street relocation: Relocation of existing private access roads associated with public road projects where necessary for public safety:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No more than 2,500 square feet of buffer impact</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• More than 2,500 square feet of buffer impact</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street activities and structures other than crossings of streams and other surface waters subject to this ordinance</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Temporary vehicular travel ways, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation. At the end of five years the restored buffer shall comply with the restoration criteria of Rule 15A NCAC 02B.0268:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No more than 2,500 square feet of buffer disturbance</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• More than 2,500 square feet of buffer disturbance</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• Associated with culvert installation or bridge construction or replacement</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Activities and Structures in Stream Buffers</td>
<td>Allowable</td>
<td>Allowable with Restrictions</td>
<td>Allowable with Mitigation</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------</td>
<td>----------------------------</td>
<td>----------------------------</td>
</tr>
</tbody>
</table>
| Temporary sediment and erosion control devices, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation. At the end of five years the restored buffer shall comply with the restoration criteria of Rule 15A NCAC 02B.0268:  
• In Zone 2, provided ground cover is established within timeframes required by the Sedimentation and Erosion Control Act, vegetation in Zone 1 is not compromised, and runoff is released as diffuse flow in accordance with this ordinance  
• In Zones 1 and 2 to control impacts associated with activities and structures approved by the local government or the EMC, provided that sediment and erosion control for upland areas is addressed, to the maximum extent practical, outside the buffer  
• In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Water Pollution Control Act  
• In-stream temporary erosion and sediment control measures for work within a stream channel | X | | X |
<p>| Utility, electric, aerial, perpendicular crossings of streams and other surface waters subject this ordinance: | | | |
| • Disturbing not more than 150 linear feet of riparian protection area | X | | |
| • Disturbing more | | X | |
| Utility, electric, aerial, other than perpendicular crossings: | | | |
| • With impacts in Zone 2 | X | | |
| • With impacts in Zone 1 | | | X |
| Utility, electric, underground, perpendicular crossings: | | | |
| • Disturbing not more than 40 linear feet of riparian protection area | X | | |
| • Disturbing more | | X | |</p>
<table>
<thead>
<tr>
<th>Utility, electric, underground, other than perpendicular crossings:</th>
<th>Allowable</th>
<th>Allowable with Restrictions</th>
<th>Allowable with Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>With impacts in Zone 2 [2]</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With impacts in Zone 1 [1, 4]</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this ordinance [3, 5]: |
|---------------------------------------------------------------|-----------|----------------------------|--------------------------|
| Disturbing not more than 40 linear feet of riparian protection area with a maintenance corridor no wider than 10 feet | X         |                            |                          |
| Disturbing not more than 40 linear feet of riparian protection area with a maintenance corridor wider than 10 feet in width | X         |                            |                          |
| Disturbing more than 40 linear feet but not more than 150 linear feet of riparian protection area with a maintenance corridor no wider than 10 feet | X         |                            |                          |
| Disturbing more than 40 linear feet but not more than 150 linear feet of riparian protection area with a maintenance corridor wider than 10 feet | X         |                            |                          |
| Disturbing more than 150 linear feet of riparian protection area | X         |                            |                          |

| Utility, non-electric, other than perpendicular crossings [4, 5]: |
|---------------------------------------------------------------|-----------|----------------------------|--------------------------|
| With impacts in Zone 2 | X |                            |                          |
| With impacts in Zone 1 [1] | X |                            |                          |

| Vegetation management: |
|---------------------------------------------------------------|-----------|----------------------------|--------------------------|
| Emergency fire control measures, provided that topography is restored | X |                            |                          |
| Mowing and harvesting of plant products in Zone 2 only | X |                            |                          |

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities and Structures in Streambuffer</strong></td>
<td>Allowable</td>
</tr>
<tr>
<td>Vehicular access roads leading to water-dependent structures as defined in 15A NCAC 02B.0202, provided they do not cross the surface water and have minimum practicable width, not exceeding 10 feet</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use result in disturbance to riparian protection area</th>
<th></th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply reservoirs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• New reservoirs, provided that a riparian protection area that meets the requirements of this ordinance is established adjacent to the reservoir</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• New reservoirs where a riparian protection area that meets the requirements of this ordinance is not established adjacent to the reservoir</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Water wells</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Single family residential water wells</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• All other water wells</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Wetland, stream and buffer restoration that results in impacts to the riparian protection area:</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Wetland, stream and buffer restoration that requires DWQ approval for the use of a 401 Water Quality Certification</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Wetland, stream and buffer restoration that does not require DWQ approval for the use of a 401 Water Quality Certification</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

[1] Provided that:
• No heavy equipment is used in Zone 1
• Vegetation in undisturbed portions of the buffer is not compromised
• Felled trees are removed by chain
• No felling of trees occurs in protected buffers or streams
• Stumps are removed only by grinding
• At the completion of the project the disturbed area is stabilized with native vegetation
• Zones 1 and 2 meet the requirements of Sections 30-12-3.9(D)

[2] Provided that, in Zone 1, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the applicant to the City of Greensboro as defined in Section 30-4-26.11
• A zone 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed
• Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed
• Root systems shall be left intact to maintain the integrity of the soil. Stumps shall be left in place where trees are cut
• Riprap shall not be used unless it is necessary to stabilize a tower
• No fertilizer shall be used other than a one-time application to re-establish vegetation
• Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state
• Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer
• In wetlands, mats shall be utilized to minimize soil disturbance

[3] Provided that poles or aerial infrastructure shall not be installed within 10 feet of a water body unless the applicant submits a no practical alternative determination and the City of Greensboro completes an evaluation as defined in Section 30-4-26.11

[4] Provided that, in Zone 1, all of the following BMPs for underground utility lines are used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the applicant to the City of Greensboro as defined in Section 30-4-26.11.
• Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed
• Root systems shall be left intact to maintain the integrity of the soil. Stumps shall be left in place, except in the utility trench
• Underground cables shall be installed by vibratory plow or trenching
• The trench shall be backfilled with the excavated soil material immediately following cable installation
• No fertilizer shall be used other than a one-time application to re-establish vegetation
• Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
• Measures shall be taken upon completion of construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
• In wetlands, mats shall be utilized to minimize soil disturbance.

[3] Perpendicular crossings are those that intersect the surface water at an angle between 75 degrees and 105 degrees.

3) **Activities and Structures that are Existing and Ongoing**

Section 30-12-3.9 shall not apply to activities and structures in the riparian protection area (Zones 1 & 2) that are legally existing and ongoing. Only the portion of the buffer occupied by the footprint of the existing activity or structure is exempt. However, this Section shall apply at the time an existing, ongoing activity or structure is changed to another activity or structure. Change of activity or structure shall involve the initiation of any activity that does not meet either of the following criteria for existing, ongoing activity:

a) It was present within the buffer as of the effective date of the local ordinance enforcing this Rule and has continued to exist since that time (April 1, 1999 for Randleman and November 1, 2010 for all portions of the City's jurisdiction except Randleman). Activities necessary to maintain activities and structures are allowed, provided that the site remains similarly vegetated, no built-upon area is added within 50 feet of the surface water and existing diffuse flow is maintained.

b) It is a project or proposed development that has been determined by the Director of Water Resources to meet at least one of the following criteria:

i) Project that requires a 401 Certification/404 Permit and these were issued prior to November 1, 2010;

ii) Project that requires a state permit (such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities), had begun construction or been under contract to begin construction, and had received all required state permits and certifications prior to November 1, 2010;

iii) Project that is being reviewed through the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor and that has reached agreement with DENR on avoidance and minimization by November 1, 2010; or

iv) Project that is not required to be reviewed through the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process or its immediate successor if a Finding of No Significant Impact has been issued for the project and the project has the written approval of the City of Greensboro prior to November 1, 2010.

4) **Mitigation**

a) Mitigation as described below shall be required of all persons who wish to impact a stream buffer when one of the following applies:

1) A person has received a “No Practical Alternative Determination” pursuant to Section 30-4-26.11 of this Ordinance for a proposed activity and structure that is designated as “allowable with mitigation” or

2) A person has received a Type 5 Modification pursuant to Section 30-4-11.3(D), 30-4-11.7, and 30-12-3.4(C)(2) of this Ordinance and is required to perform mitigation as a condition of granting the modification.

b) The Director of Water Resources shall issue a mitigation approval upon determining that the applicant has made payment of a compensatory mitigation fee to the Riparian Buffer Restoration Fund pursuant to 15A NCAC 02B .0269 (Jordan Water Supply Nutrient Strategy: Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program) and
that payment has been accepted by the NC Ecosystem Enhancement Program, or that payment has been made and accepted by a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, and the applicable trading criteria in Rule 15A NCAC 02B .0273:

30-12-3.10 Activities Regulated by Other Governmental Agencies

[A] Designated Agencies
The following are the designated agencies responsible for implementing the requirements of the EMC Rules for the specified activities:
1) Agriculture - Guilford Soil and Water Conservation District
2) Silviculture - NC Division of Forest Resources

[B] Transportation
The North Carolina Department of Transportation shall comply with the practices outlined in its document entitled "Best Management Practices for the Protection of Surface Waters," which is incorporated by reference.

[C] Hazardous Materials
1) The Greensboro Emergency Management Assistance Agency and the Guilford County Local Emergency Planning Committee (LEPC) are the designated management agencies responsible for implementing the provisions of this subsection pertaining to hazardous materials.
2) An inventory of all hazardous materials used and stored in the watershed shall be maintained. A spill/failure containment plan and appropriate safeguards against contamination are required. Waste minimization and appropriate recycling of materials is encouraged.
3) Properties in the WCA or GWA shall comply with the requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances (42 USC 11000 et seq.), or Section 311 of the Clean Water Act, as amended (CWA)(33 USC 1251 et seq.; oil and hazardous substances) if hazardous substances listed in either of these sections are stored or used on the site.

30-12-3.11 Density

[A] Density Limits
New development shall not exceed the density limits in Table 12-6 (Density Limits in Upper and Lower Randleman Lake Watersheds) or Table 12-7 (Density Limits in Water Supply Watersheds, and Other Watershed Districts), whichever is applicable.

[B] Measurement in Low-density Option
For the low-density option, density is measured in dwelling units per acre for single-family detached residential development; for recreational facilities such as golf courses and tennis and swim clubs lying within such developments, measure the built-upon area on the lot or common elements and divide by 3,000 square feet to obtain a dwelling units equivalency number. Density is measured in percentage of the land surface covered by built-upon area for all other residential and nonresidential development. When buildings for single-family detached residential uses and buildings for other uses are intermingled, the built-upon area measurement shall apply. When sections devoted to single-family detached residential buildings and other sections devoted to buildings for other uses are present in the same development, the developer may apply the appropriate measurements to the different uses or may use the built-upon area measurement for the entire development. When using the built-upon area measurement, assume 3,000 square feet of built-upon area per single-family detached residential lot to cover the built-upon area on the lot and in the portion of its driveway within the street right-of-way.
### Table 12-6
Density Limits in Upper and Lower Randleman Lake Watersheds in Dwelling Units Per Acre &Percent Built-Upon Area [1]

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Overlay Zone &amp; Tier</th>
<th>Low-Density Option</th>
<th>High-Density Option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DU/AC</td>
<td>%BUA</td>
</tr>
<tr>
<td>WCA,1</td>
<td>See BUA</td>
<td>0.5</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,2</td>
<td>0.2</td>
<td>2.4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,3 sewer</td>
<td>0.5</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>no sewer</td>
<td>0.33</td>
<td>4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,4 sewer</td>
<td>[4]</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>no sewer</td>
<td>[4]</td>
<td>12</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,1</td>
<td>See BUA</td>
<td>0.5</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,2</td>
<td>0.2</td>
<td>2.4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,3 sewer</td>
<td>2[3]</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>no sewer</td>
<td>0.33</td>
<td>4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,4 sewer</td>
<td>2[3]</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>no sewer</td>
<td>1***</td>
<td>12</td>
<td>no HD option</td>
</tr>
</tbody>
</table>

[1] If, compared to the sidewalk installation requirements effective through December 31, 2002, the sidewalk installation requirements contained in Ordinance Number 02-239, effective January 1, 2003, increase the amount of sidewalk built-upon area, thereby exceeding the maximum built-upon area allowable under the High-Density Option or necessitating additional stormwater control, treatment, or mitigation measures, the Technical Review Committee may approve reductions to required street pavement widths, sidewalk widths, driveway widths, or off-street parking area, so as to result in the same built-upon area as under the previous sidewalk installation requirements.

[2] In a subdivision, the BUA maximum applies to the subdivision as a whole, including streets, lots, etc. The maximum BUA allowed by this column (assuming engineered stormwater controls are large enough) shall be allocated among streets, lots, etc. In single-family detached development, the allocation to each house lot shall be uniform. In other development, the allocation may vary among lots. In all cases, the final plat shall clearly state each lot's allocation and restrictive covenants shall call attention to these allocations. On new or extended thoroughfare streets, allocate enough BUA to cover 5 foot sidewalks on both sides; and on all other new or extended streets allocate enough to cover a 5 foot sidewalk on one side.

[3] Alternatively, if total area minus area in street right-of-way, divided by number of house lots, equals 20,000 square feet or more, that is Low Density.

[4] Alternatively, if total area minus area in street right-of-way, divided by number of house lots, equals 40,000 square feet or more, that is Low Density.

In making determinations whether modification requests are minor or major, remember that all Greensboro's WCA Tier 4 and the portion of its Tier 3 lying more than 1/2 mile from normal pool elevation are beyond the minimum WCA required by EMC Rules.

### Table 12-7
Density Limits in Other Water Supply Watersheds and Other Watershed Districts in Dwelling Units Per Acre & Percent Built-Upon Area [1]

<table>
<thead>
<tr>
<th>Watershed District</th>
<th>Overlay Zone &amp; Tier</th>
<th>Low-Density Option</th>
<th>High-Density Option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DU/AC</td>
<td>%BUA</td>
</tr>
<tr>
<td>Greensboro &amp; Polecat Creek (WS-III)</td>
<td>GWA</td>
<td>[4]</td>
<td>24</td>
</tr>
</tbody>
</table>

[1]
<table>
<thead>
<tr>
<th>WCA</th>
<th>See BUA</th>
<th>0.5</th>
<th>no HD option</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCA,2</td>
<td>0.2</td>
<td>2.4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,3, sewer</td>
<td>1[5]</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>no sewer</td>
<td>0.33</td>
<td>4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,4, sewer</td>
<td>2[4]</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>no sewer</td>
<td>1[5]</td>
<td>12</td>
<td>no HD option</td>
</tr>
<tr>
<td>Lake Mackintosh (WS-IV)</td>
<td>GWA</td>
<td>2[4]</td>
<td>24</td>
</tr>
<tr>
<td>WCA,1</td>
<td>See BUA</td>
<td>0.5</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,2</td>
<td>0.2</td>
<td>2.4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,3, sewer</td>
<td>2[4]</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>no sewer</td>
<td>0.33</td>
<td>4</td>
<td>no HD option</td>
</tr>
<tr>
<td>WCA,4, sewer</td>
<td>2[4]</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>no sewer</td>
<td>1[5]</td>
<td>12</td>
<td>no HD option</td>
</tr>
<tr>
<td>Other Watershed Districts</td>
<td>Other Watershed Districts</td>
<td>2[4]</td>
<td>24</td>
</tr>
</tbody>
</table>

[1] If, compared to the sidewalk installation requirements effective through December 31, 2002, the sidewalk installation requirements contained in Ordinance Number 02-239, effective January 1, 2003, increase the amount of sidewalk built-upon area, thereby exceeding the maximum built-upon area allowable under the High-Density Option or necessitating additional stormwater control, treatment, or mitigation measures, the Technical Review Committee may approve reductions to required street pavement widths, sidewalk widths, driveway widths, or off-street parking area, so as to result in the same built-upon area as under the previous sidewalk installation requirements.

[2] Watershed plans approved on and after October 31, 1997, collectively covering up to 10% of the WS-III GWA, may receive allocations permitting up to 70% BUA. An approved watershed plan constitutes a completed application for such an allocation. An allocation is granted to a lot when a building permit is issued thereon and to a part of a subdivision when the engineered stormwater control structure for it has been substantially completed. An allocation is lost if the building permit or plat approval expires or is revoked.

[3] In a subdivision, the BUA maximum applies to the subdivision as a whole, including streets, lots, etc. The maximum BUA allowed by this column (assuming engineered stormwater controls are large enough) shall be allocated among streets, lots, etc. In single-family detached development, the allocation to each house lot shall be uniform. In other development, the allocation may vary among lots. In all cases, the final plat shall clearly state each lot’s allocation and restrictive covenants shall call attention to these allocations. On new or extended thoroughfare streets, allocate enough BUA to cover 5 foot sidewalks on both sides; and on all other new or extended streets allocate enough to cover a 5 foot sidewalk on one side.

[4] Alternatively, if total area minus area in street right-of-way, divided by number of house lots, equals 20,000 square feet or more, that is Low Density.

[5] Alternatively, if total area minus area in street right-of-way, divided by number of house lots, equals 40,000 square feet or more, that is Low Density.

In making determinations whether modification requests are minor or major, remember that all Greensboro’s WCA Tier 4 and the portion of its Tier 3 lying more than 1/2 mile from normal pool elevation are beyond the minimum WCA required by EMC Rules.

30-12-3.12 Stormwater Quality Controls

(A) Applicability

Where stormwater control is required by this Article, runoff from the following shall be controlled, and engineered stormwater controls and other best management practices (BMPs) shall be sized accordingly.

1) Newly built-upon areas and other new development on a site;
2) To the extent practicable, existing development on the site (consult with the Director of Water Resources for a determination); and
3) Any other on-site runoff that flows into the structure or BMP.

(B) Roadway and Driveway Connections

Driveway and roadway connections shall be treated to the maximum extent possible. Such connections will be evaluated on a site-by-site basis.
(C) Methods of Stormwater Quality Control

1) Developments using the high-density option shall use engineered stormwater controls, which may consist of wet detention ponds or alternative stormwater management systems consisting of other treatment options, or a combination of options approved by the Director of the Division of Water Quality in accordance with 15A NCAC 2B.0104(g), and 15A NCAC 2H.1008(a). The design criteria for approval shall include control and treatment of the runoff from the first one inch of rain and a minimum of 85% average annual removal for Total Suspended Solids (TSS), as well as discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 48 hours but not more than 120 hours.

2) Developments using the low-density option, if they are required to have stormwater control, shall use either a method allowed under the high-density option or, as applicable, a method prescribed in Section 30-12-5 or Section 30-12-4. For low density development in Other Watershed Districts the use of vegetated conveyances shall be used to the maximum extent practicable.

3) New development that drains into whole or part to class NSW waters or waters assigned a Total Maximum Daily Load (TMDL) by North Carolina DWQ shall design and implement best stormwater management practices, up to and including the installation of engineered stormwater controls, that reduce nutrient loading, or other pollutant of concern, while still meeting other requirements of this ordinance. The Director of Water Resources shall have final approval of any proposed structural best management practice (BMP) required to meet State mandated nutrient loading or other pollutant of concern reduction measures in order to facilitate treatment of the nutrient or pollutant of concern to the maximum extent practicable.

(D) Water Quality Control Exemptions

1) Development in Other Watershed Districts that cumulatively disturbs less than one acre and is not part of a Larger Common Plan of Development, Redevelopment or Sale is exempt from the stormwater quality control provisions of this section. Development that cumulatively disturbs less than one acre is not exempt if such activities are part of a Larger Common Plan of Development, Redevelopment or Sale, even though multiple, separate or distinct activities take place at different times on different schedules.

2) Development that meets all of the following requirements is exempt from the stormwater quality control provisions of this section:
   a) The division of a tract in single ownership;
   b) The tract area is not greater than 2 acres;
   c) The division does not result in more than 3 lots;
   d) No street right-of-way dedication is involved;
   e) The resultant lots are equal to or exceed the standards of this ordinance; and
   f) The development does not cumulatively disturb one acre or more.

Section 2. That Subsection (B) of Section 30-12-4.2, Land Disturbance Minimization, is hereby amended to read as follows:

(B) Land Disturbance

1) No land-disturbing activity is allowed within stream buffers, open-channel drainageways carrying 17 cubic feet per second or more based upon the 100-year storm event, 15% slopes adjacent to drainageways, water quality conservation easements, or undisturbed easements (UDE), except for road crossings, greenway, and trail crossings, utilities, watershed devices, and soil erosion and sedimentation control devices associated with road crossing and utility construction. Land disturbing activities associated with watershed devices shall not be located closer than 30 feet to the top of bank for intermittent and perennial streams.

2) Cut or fill activities resulting in slopes of 25% 33% or more are not allowed, except to meet minimum safety standards for roadways and trails or minimum building code or health code requirements.
3) The transfer of stormwater from a drainage area of 5 acres or greater by piping or channeling between sub-basins within the WCA is not permitted unless approved by the Technical Review Committee. The piping or channeling of stormwater from a WCA to a GWA or to a non-watershed basin is allowed.

4) A portion of the site shall remain in an undisturbed state in accordance with the following percentages:

<table>
<thead>
<tr>
<th>Tier</th>
<th>Undisturbed Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>90%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>90%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>20%</td>
</tr>
<tr>
<td>Tier 4</td>
<td>15%</td>
</tr>
</tbody>
</table>

a) At least 25% of the undisturbed areas are to include land that is wooded or reforested in accordance with the following:
   i) Reforestation shall include a minimum of one tree per 200 square feet of surface area and shall be made up of a mixture of deciduous hardwood and evergreen trees that are a minimum of 4 feet tall at planting and approved by the Director of Water Resources.
   ii) The trunk of any required tree shall be no closer than 10 feet to any other tree.

b) The required undisturbed areas shall include the land within 30 feet of the top of bank for intermittent and perennial streams; however, road, greenway, or trail crossings, utilities, and soil erosion and sedimentation control devices associated with road crossing and utility construction may be constructed in this area.

b) e) All undisturbed areas are to be dedicated as undisturbed easements (UDE) in accordance with Sec. 30-12-4.2(C)(1)c

c) d) When undisturbed areas are located in subdivisions with more than 2 lots, the undisturbed area shall be located within common elements and an owners’ association shall be required for the purposes of ownership and maintenance responsibility.

d) e) The common elements for undisturbed areas shall have a minimum width of 24 feet, and shall be accessible to all homeowners in the development.

Section 3. That Subsection (A) of Section 30-4-11.7, Modification of Water Supply Watershed Standards, is hereby amended to read as follows:

(A) Type 5 Modifications—Modifications to Major Watershed Standards that are major in nature
Recognizing that modifications to Major Watershed standards are only approachable in unique circumstances on a case-by-case basis by the North Carolina Environmental Management Commission pursuant to the North Carolina Administrative Code 15A1, North Carolina Administrative Code 02B, 0104(r) of the North Carolina Department of Environment and Natural Resources (NCDENR)“Redbook,” the City Council hereby designates the North Carolina Environmental Management Commission as the final decision-making body for Type 5 Major Watershed modifications. The approval procedure is the same as in subsection 30-4-11.5(D), except that the Planning Board and City Council must make recommendations to the North Carolina Environmental Management Commission, which must approve or deny Type 5 Major Watershed modification requests.

Section 4. That Section 30-4-18.1, Improvements Required, is hereby amended to read as follows:

30-4-18.1 Original Subdividers or developer and all subsequent subdividers and developers are responsible for the construction, installation, and maintenance of the following improvements in accordance with the standards in this ordinance:

1) all streets within the subdivision and improvements to existing streets required for safe and adequate access to the subdivision as may be required by this ordinance;

2) traffic control devices;
3) water, sewer and easements;
4) drainage facilities and easements;
5) engineered stormwater controls and easements (see Sec. 30-13-5);
6) erosion and sedimentation control devices; and
7) any other on- or off-site improvements required by this article or required at the time of preliminary plat approval.

Section 5. That Section 30-4-20.3, Default, is hereby amended to read as follows:

30-4-20.3 Default

(A) Public Improvements
Developments with public improvements that are not completed and accepted at least 30 days before the expiration of the performance guarantee will be considered to be in default. Upon default the surety bonding company or the financial institution holding the escrow account must, if requested by the city, pay to the city all or any portion of the bond or escrow fund in an amount deemed necessary by the city to complete the improvements. Upon payment, the city must expend the funds, or portion of the funds, to complete all or any portion of the required improvements. The city must return any funds not spent in completing the improvements. Default on a project does not release the developer from liability and responsibility for completion of the required improvements.

(B) Private Improvements (engineered stormwater controls or other improvements to remain privately owned)
Developments with private improvements that are not completed and accepted at least 30 days before the expiration of the performance guarantee will be considered to be in default. Upon default the surety bonding company or the financial institution holding the escrow account must, if requested by the city, pay to the city all or any portion of the bond or escrow fund in an amount deemed necessary by the city to have the improvements completed. Upon payment, the city shall require completion of all required improvements and shall use such funds or portion thereof from the bond or escrow account to reimburse costs for all or any portion of the required improvements the city must return any funds not spent in completing the improvements. Default on a project does not release the original subdivider or developer and all subsequent subdivider and developers from liability and responsibility for completion of the required improvements.

Section 6. That Section 30-4-26 Permits and Certificates, is hereby amended by adding a new Subsection 30-4-26.11, Determination of No Practical Alternatives, to read as follows:

30-4-26.11 Determination of No Practical Alternatives

(A) Persons who wish to undertake uses designated as allowable or allowable with mitigation shall submit a request for a 'no practical alternatives' determination to the City of Greensboro. Submission may be made as part of a Stormwater and/or Watershed Development Plan. The applicant shall certify that the project meets all the following criteria for finding 'no practical alternatives':

1) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality;

2) The use cannot practically be reduced in size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life and habitat, and protect water quality; and

3) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality.

(B) The applicant shall also submit at least the following information in support of their assertion of 'no practical alternatives':
1) The name, address and phone number of the applicant;
2) The nature of the activity to be conducted by the applicant;
3) The location of the activity, including the jurisdiction;
4) A map of sufficient detail to accurately delineate the boundaries of the land to be utilized in carrying out the activity, the location and dimensions of any disturbance in riparian buffers associated with the activity, and the extent of riparian buffers on the land;
5) An explanation of why this plan for the activity cannot be practically accomplished, reduced or reconfigured to better minimize disturbance to the riparian buffer, preserve aquatic life and habitat and protect water quality; and
6) Plans for any best management practices proposed to be used to control the impacts associated with the activity.

(C) Within 60 days of a submission that addresses Section 30-4-26.11 (B), the Director of Water Resources shall review the entire project and make a finding of fact that the criteria have been met. A finding of "no practical alternatives" shall result in issuance of an Authorization Approval. Failure to act within 60 days shall be construed as a finding of "no practical alternatives" and an Authorization Approval shall be issued to the applicant unless one of the following occurs:

1) The applicant agrees, in writing, to a longer period;
2) The Director of Water Resources determines that the applicant has failed to furnish requested information necessary to the City of Greensboro decision, including, but not limited to TRC approval;
3) The final decision is to be made pursuant to a public hearing; or
4) The applicant refuses access to its records or premises for the purpose of gathering information necessary to the City of Greensboro’s decision.

(D) The Director of Water Resources may attach conditions to the Authorization Approval that support the purpose, spirit and intent of this Ordinance.

(E) Any appeals of determinations regarding Authorization Approvals shall be referred to the Director of the Division of Water Quality, c/o the 401 Oversight Express Permitting Unit, or its successor. The decision by the Director of Water Quality is subject to review as provided in G.S. 150B Articles 3 and 4.

Section 7. That Section 30-13-5.3, Maintenance Note Required on Final Plat, is hereby amended to read as follows:

30-13-5.3 Maintenance Note Required on Final Plat

When a subdivision contains permanent engineered stormwater controls that serve more than 2 lots within the subdivision, each final plat in the subdivision must contain a prominent note with the full text of paragraph 30-13-5.2(E) and the name of the owners’ association.

Section 8. That Subsection (3) of Section 30-13-5.4(A), Plat Recordation, is hereby amended to read as follows:

3) If the Planning Director of Water Resources determines that there is a potential risk that underground rock, buried materials, springs, underground utility lines, or some other obstacle may make construction of the structure unviable, the Planning Director of Water Resources is authorized to require that excavation for the structure be successfully performed prior to acceptance of the performance guarantee.

Section 9. That Subsection (b) of Section 30-4-15.6.4, Plan Certification Requirement for Structural Stormwater Management Improvements, is hereby amended to read as follows:

b) Quantity Control Certifications

An engineer’s certification of quantity control is required before plan final the approval of the Stormwater Management Plan by the Director of Water Resources. The engineer’s certification of control must be in the following form: In addition, an engineer’s certification of quantity control completion is required before final approval of the Engineered Stormwater Control by the Director of Water Resources.
5) **Quantity Control Certification**

An engineer's certification of quantity control is required before the approval of the Stormwater Management Plan by the Director of Water Resources. The engineer's certification must be in the following form:

**ENGINEER’S CERTIFICATION OF**

**STORMWATER QUANTITY CONTROL**

Pursuant to generally accepted engineering standards, I certify that the following statement or statements are accurate with respect to the preliminary plan/site plan (name of plan): [Please check all that apply.]

The development shown on this plan is consistent with the provisions contained on the preliminary plan/site plan (name of plan), which was approved prior to July 1, 1999, and which approval has not lapsed, and therefore is exempt from compliance with the stormwater management requirements of Sec. 30-12-7.

The net increase in built-upon area is less than 400 square feet; therefore, this development is exempt from Sec. 30-1-1.1(A)7(b) of the Greensboro Land Development Ordinance.

The stormwater management study included with this plan indicates that, to the best of my knowledge, belief, and information there will be no downstream flooding, drainage, or erosion problems as a result of the proposed development between the point where the runoff discharges from the property to where the site development area represents less than 10% of the total drainage area. Therefore, no quantity control improvement is proposed.

The stormwater management study included with this plan indicates that, to the best of my knowledge, belief, and information there will be downstream flooding, drainage, or erosion problems associated with the development. The proposed stormwater management improvements(s) indicated on this plan is or will be designed to minimize increased flooding, drainage, and erosion problems from occurring between the point where the runoff discharges from the property to where the site development area represents less than 10% of the total drainage area.

The stormwater control structure or structures shown on this plan are or will be designed to reduce the peak flow rates in the post-development, 2-year, 24-hour storm event and the 10-year, 24-hour storm event to pre-development peak flow rates.

The 10% point is located upstream of the site outlet; therefore no additional quantity control is required.

P.E. SEAL

SIGNATURE

DATE

6) **Stormwater Control Completion Certificate**

The engineer's certification, required in accordance with Sec. 30-12-3.7 (B) upon completion of permanent stormwater control structures, shall be of the following form:

**ENGINEER’S CERTIFICATION OF**

**STORMWATER CONTROL COMPLETION**

I certify that, pursuant to generally accepted engineering standards in the community, it is my professional opinion that the stormwater control(s) labeled as on this plat (or on name of plat) as recorded in PB , PG in the Office of the Guilford County Register of Deeds has been completed in conformance with the plans and specifications approved on (approval date), has its full design volume available, and is functioning as designed

P.E. SEAL

SIGNATURE

DATE

Section 10. That Section 30-15-2, Terms Beginning with "A", is hereby amended by adding the following definitions within alphabetical order:

**Access Trails**
Means pedestrian trails constructed of pervious or impervious surfaces and related structures to access a surface water, including boardwalks, steps, rails, and signage.

**Airport Facilities**

Means all properties, facilities, buildings, structures, and activities that satisfy or otherwise fall within the scope of one or more of the definitions or uses of the words or phrases ‘air navigation facility’, ‘airport’, or ‘airport protection privileges’ under G.S. 63-1; the definition of ‘aeronautical facilities’ in G.S. 63-79(1); the phrase ‘airport facilities’ as used in G.S. 159-48(b)(1); the phrase ‘aeronautical facilities’ as defined in G.S. 159-81 and G.S. 159-97; and the phrase ‘airport facilities and improvements’ as used in Article V, Section 13, of the North Carolina Constitution, which shall include, without limitation, any and all of the following: airports, airport maintenance facilities, clear zones, drainage ditches, fields, hangars, landing lighting, airport and airport-related offices, parking facilities, related navigational and signal systems, runways, stormwater outfalls, terminals, terminal shops, and all appurtenant areas used or suitable for airport buildings or other airport facilities, and all appurtenant rights-of-way; restricted landing areas; any structures, mechanisms, lights, beacons, marks, communicating systems, or other instrumentalities or devices used or useful as an aid, or constituting an advantage or convenience to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport or restricted landing area; easements through, or interests in, air space over land or water, interests in airport hazards outside the boundaries of airports or restricted landing areas, and other protection privileges, the acquisition or control of which is necessary to ensure safe approaches to the landing areas of airports and restricted landing areas, and the safe and efficient operation thereof and any combination of any or all of such facilities. Notwithstanding the foregoing, the following shall not be included in the definition of ‘airport facilities’:

1. Satellite parking facilities;
2. Retail and commercial development outside of the terminal area, such as rental car facilities; and
3. Other secondary development, such as hotels, industrial facilities, freestanding offices and other similar buildings, so long as these facilities are not directly associated with the operation of the airport, and are not operated by a unit of government or special governmental entity such as an airport authority, in which case they are included in the definition of ‘airport facilities’.

Section 11. That Section 30-15-4, Terms Beginning with ‘C’, is hereby amended by adding the following definition within alphabetical order:

**Canal**

Means a man-made canal other than a modified natural stream constructed for drainage purposes that is typically dug through inter stream divide areas. A ditch or canal may have flows that are perennial, intermittent, or ephemeral and may exhibit hydrological and biological characteristics similar to perennial or intermittent streams.

Section 12. That the definition of Ditch/swale within Section 30-15-5, Terms Beginning with ‘D’, is hereby amended to read as follows:

**Ditch/swale**

Open channel that infiltrates and/or transports runoff waters. [definition applies to Stormwater Management regulations (Sec. 30-12-7.2) only]. Means a man-made channel other than a modified natural stream constructed for drainage purposes that is typically dug through interstream divide areas.

Section 13. That Section 30-15-6, Terms Beginning with ‘E’, is hereby amended by adding the following definition within alphabetical order:

**Ephemeral stream**

Means a feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water.

Section 14. That Section 30-15-8, Terms Beginning with ‘G’, is hereby amended by adding the following definition within alphabetical order:

**Greenway/Recreation Path**

Means pedestrian trails constructed of pervious or impervious surfaces and related structures including but not limited to boardwalks, steps, rails, and signage.
Section 15. That Section 30-15-9 Terms Beginning with "H", is hereby amended by adding the following definition within alphabetical order:

**High Value Tree**
Means a tree that meets or exceeds the following standards: for pine species, 14-inch DBH or greater or 18-inch or greater stump diameter; or for hardwoods and wetland species, 16-inch DBH or greater or 24-inch or greater stump diameter.

Section 16. That the definition of Intermittent Stream within Section 30-15-10 Terms Beginning with "I", is hereby amended to read as follows:

**Intermittent Stream**
Means a well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the water table. The flow may be heavily supplemented by stormwater runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.

In all watersheds, streams, and lakes and ponds along them, that are indicated as being intermittent 1) on the most recent version of the US Geological Survey 1:24000 scale (7.5 minute quadrangle) topographic maps, 2) on the most recent version of the hard copy Soil Survey map developed by the USDA -- Natural Resource Conservation Service, 3) on a map approved by the Geographic Information Coordinating Council and by the NC EMC. Prior to approving a map under this Item, the Commission shall provide a 30-day public notice and opportunity for comment, or 4) by an examination of site-specific evidence by the City Stormwater Management Division using criteria approved by the NC Division of Water Quality or U.S. Army Corps of Engineers. However, if any of the above-mentioned maps indicate an area as an intermittent stream but the Stormwater Management Division finds no intermittent water body actually exists on the ground, that area will not be deemed an intermittent stream. Ponds and lakes created for animal watering, crop irrigation, or other agricultural uses that are not part of a natural drainage are not streams. If the City of Greensboro develops a detailed stream network map covering one or more watersheds, and that map is approved by the NC Division of Water Quality, then within those watersheds covered by that map intermittent streams must thenceforth be as shown by that map. In the event of a conflict in stream determination, a NC Division of Water Quality or U.S. Army Corps of Engineers determination shall supersede any local designation.

Section 17. That the definitions of Minor Watershed Modification and Major Watershed Modification of Section 30-15-13, Terms Beginning with "M", are hereby deleted in their entirety and the definition of Modification is amended to read as follows:

**Modification**
See Sec. 30-4-11, and Sec. 30-12-34(C).

Section 18. That the definition of Perennial Stream of Section 30-15-16, Terms Beginning with "P", is hereby amended to read as follows:

**Perennial Streams**
Means a well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological and physical characteristics commonly associated with the continuous conveyance of water.

In all watersheds, streams, and lakes and ponds along them, that are indicated as being perennial 1) on the most recent version of the US Geological Survey 1:24000 scale (7.5 minute quadrangle) topographic maps, 2) on the most recent version of the hard copy Soil Survey map developed by the USDA -- Natural Resource Conservation Service, 3) on a map approved by the Geographic Information Coordinating Council and by the NC EMC. Prior to approving a map under this Item, the Commission shall provide a 30-day public notice and opportunity for comment, or 4) by an examination of site-specific evidence by the City Stormwater Management Division using criteria approved by the NC Division of Water Quality or U.S. Army Corps of Engineers. However, if any of the above-mentioned maps indicate an area as a perennial stream but the Stormwater Management Division finds no perennial water body actually exists on the ground, that area will not be deemed a perennial stream. Ponds and lakes created for animal watering, crop irrigation, or other agricultural uses that are not part of
a natural drainageway are not streams. If the City of Greensboro develops a detailed stream network map covering one or more watersheds, and that map is approved by the NC Division of Water Quality, then within the watersheds covered by that map intermittent streams must therefor be as shown by that map. In the event of a conflict in stream determination, a NC Division of Water Quality or U.S. Army Corps of Engineers determination shall supersede any local designation.

Section 19. That Section 30-15-16, Terms Beginning with “P,” is hereby amended by adding the following definitions within alphabetical order:

**Perennial Waterbody**

Means a natural or man-made basin, including lakes, ponds, and reservoirs, that stores surface water permanently at depths sufficient to preclude growth of rooted plants. For the purpose of stream buffer requirements the waterbody must be part of a natural drainageway (i.e. connected by surface flow to a stream).

**Permanent Engineered Stormwater Control**

See definition for “Structural Best Management Practice.”

Section 20. That Section 30-15-18, Terms Beginning with “S,” is hereby amended by adding the following definitions within alphabetical order:

**Shoreline Stabilization**

Shoreline Stabilization is the in-place stabilization of an eroding shoreline. Stabilization techniques which include “soft” methods or natural materials (such as root wads, or rock yarns) may be considered as part of a restoration design. However, stabilization techniques that consist primarily of “hard” engineering, such as concrete lined channels, riprap, or gabions, while providing bank stabilization, shall not be considered stream restoration.

**Stream Restoration**

Stream restoration is defined as the process of converting an unstable, altered or degraded stream corridor, including adjacent riparian zone and flood-prone areas to its natural or referenced, stable conditions considering recent and future watershed conditions. This process also includes restoring the geomorphic dimension, pattern, and profile as well as biological and chemical integrity, including transport of water and sediment produced by the stream’s watershed in order to achieve dynamic equilibrium. Reference courses or referenced reach means a stable stream that is in dynamic equilibrium with its valley and contributing watershed. A reference reach can be used to develop natural channel design criteria for stream restoration projects.

**Stream**

Means a body of concentrated flowing water in a natural low area or natural channel on the land surface.

**Stump Diameter**

Means the diameter of a tree measured at six inches above the ground surface level.

**Surface Waters**

Means all waters of the state as defined in G.S. 143-212 except underground waters.

Section 21. That the definition of Structural Best Management Practice within Section 30-15-18, Terms Beginning with “S,” is hereby amended to read as follows:

**Structural Best Management Practice**

A physical device designed to trap, settle out, or filter pollutants from stormwater runoff; to alter or reduce stormwater runoff velocity, amount, timing, or other characteristics; to approximate the pre-development hydrology on a developed site; or to achieve any combination of these goals. Structural BMP includes physical practices such as constructed wetlands, vegetative practices, filter strips, grassed swales, and other methods installed or created on real property. “Structural BMP” is synonymous with “structural practice,” “stormwater control facility,” “stormwater control practice,” “stormwater management practice,” “stormwater control measures,” and “structural stormwater treatment systems.” [Definition applies to Stormwater Management regulations (See 30-12-7 only).

Section 22. That Section 30-15-19, Terms Beginning with “T,” is hereby amended by adding the following definition within alphabetical order:

**Temporary Road**
Means a road constructed temporarily for equipment access to build or replace hydraulic conveyance structures such as bridges, culverts, pipes or water dependent structures, or to maintain public traffic during construction.

Tree Caliper
Means the diameter of a tree measured at six inches above the ground surface level.

Section 23. That Section 30-12-7 Stormwater Management, is hereby amended to read as follows:

30-12-7 Stormwater Management

30-12-7.1 General

(A) Purposes and Objectives
The regulations of this section are intended to protect and promote the public health, safety and welfare by preventing the introduction of potentially harmful materials into the city storm sewer system; to protect property from potential stormwater damage; to maintain and enhance water quality; and to meet the requirements in the City of Greensboro’s National Pollutant Discharge Elimination System Permit for Stormwater Discharges. Other specific objectives of these regulations are to:

1) provide for the enforcement of the city's stormwater quality management program;

2) reduce the discharge of pollutants to the storm sewer system to the maximum extent practicable by requiring, where appropriate, the use of best management practices, structural and/or nonstructural stormwater quantity and quality control measures and other provisions;

3) provide for the inspection and proper maintenance of structural and nonstructural stormwater controls and the municipal separate storm sewer;

4) prohibit non-stormwater discharges to the city storm sewer and require the removal of illicit connections to the city storm sewer;

5) prevent improper disposal of materials that degrade water quality;

6) permit sampling and monitoring for pollutants such as those associated with illicit discharges, improper disposal, industrial and construction activities, and the application of pesticides, herbicides, and fertilizers; and

7) reduce erosion associated with stormwater runoff.

(B) Applicability
The regulations of this section apply govern the development and use of land and structures within the corporate limits of the city.

(C) Right-of-entry

1) The city-manager or the city-manager’s designee Director of Water Resources has the right-of-entry on or upon the property of any person subject to this chapter and any permit/document issued hereunder. The city-manager or the city-manager’s designee Director of Water Resources must be provided ready access to all parts of the premises for the purposes of inspection, monitoring, sampling, inventory, records examination and copying, and the performance of any other duties necessary to determine compliance with this chapter.

2) Where a person has security measures in force which require proper identification and clearance before entry into its premises, the person must make necessary arrangements with its security guards so that, upon presentation of suitable identification, the city-manager or the city-manager’s designee Director of Water Resources will be permitted to enter without delay for the purposes of performing specific responsibilities.

3) The city-manager or the city-manager’s designee Director of Water Resources has the right to set up on the person’s property such devices as are necessary to conduct sampling and/or metering of the person’s operations.
4) Any temporary or permanent obstruction to safe and easy access to the areas to be inspected and/or monitored shall be removed promptly by the person at the written or verbal request of the city manager or the city manager's designee Director of Water Resources. The costs of clearing such access must be borne by the person.

5) The city manager or the city manager's designee Director of Water Resources may inspect the facilities of any user in order to ensure compliance with this chapter. Such inspection requires the consent of the owner, manager, or signatory official. If such consent is refused, the city manager or the city manager's designee Director of Water Resources may seek issuance or an administrative search warrant.

(Ord. No. 94-22, § 1, 5-2-94)

(D) Assessments

1) Property owners of single-family homes, townhouses and condominium properties can request that city council approve a resolution that allows stormwater improvement costs to be assessed against the property as a lien.

2) The city council is authorized to determine which stormwater improvements inside the city will be provided and the type of solution, either piping or non-piping, for the improvement. The city council likewise has the authority to determine the amount of construction cost to be borne by the abutting property owners and the amount to be borne by the city.

3) The assessment formula for stormwater improvements using a piping solution must be set at a rate that recovers 100% of the construction cost, including engineering, labor and materials of a 15-inch stormwater pipe or a rate not to exceed 50% of the total project cost, whichever is less. The assessment formula for stormwater improvements using a non-piping solution must be set at a rate of 10% of the cost, including engineering, labor and materials. The assessment rate must be reviewed for any necessary adjustments once a year in coordination with the annual budget process.

4) Upon receiving notice of completion of a stormwater management project, city council must confirm all assessment obligations in the project and must call for advertisement of assessment obligations in a local newspaper published at least weekly and that is generally available to Greensboro citizens. Such advertisement must run within 45 days following the date of confirmation and must inform that all listed assessment obligations may be fully satisfied, without interest, if payment-in-full of the total principal balance is received by the tax collector within 90 days following the date of confirmation.

5) Assessment accounts not paid in full within 90 days following the confirmation date must be scheduled for payment in substantially equal installments, plus interest on the whole unpaid principal balance. Such interest must be computed from the date of confirmation at a rate fixed in the assessment resolution, with the rate not exceeding the maximum allowed by law. The first installment is due and payable no later than 365 days following confirmation, with subsequent installments being due and payable on the regular and sequential cycle of the installment frequency (monthly, quarterly, semi-annually or annually) elected by the obligee and with the final installment being due and payable by not later than one 120 months after the confirmation date.

6) If the obligee expresses no preference regarding payment frequency, the assessment obligation will be scheduled for payment in 10 annual installments. Upon approval of the tax collector, the frequency of payment for existing assessment accounts may be changed for the economic and budgetary convenience of the obligee, with the first such change being granted without charge and with subsequent changes being granted with a transaction fee of $35.00.

7) At any time after the first 90 days in the life of an assessment account, the full principal balance may be paid in full with all accrued interest and without early payoff penalty.

(Ord. No. 99-97, § 1, 6-15-99; Ord. No. 00-46, § 1, 3-7-00; Ord. No. 02-103, § 1, 6-18-02)
Commercial and Residential

(A) New Development

1) Drainage

a) It is the duty of all property owners, in order to abate and prevent nuisances resulting from improper drainage, to provide at their own expense a proper and adequate drainage system of their respective premises, such drainage system to conform to the design established by the city. (Ref: Section 29-30)

b) Rainwater leaders may not extend beyond the building or property line, but rather must be built in chases or on the inside of the wall, and may not empty on any street or sidewalk. (Ref: Section 6-27)

c) No person may construct or install any ditch, pipe or other device for the diversion or transmission of storm drainage that will in any way affect the operation or maintenance of city street, water, sanitary sewer or storm sewer facilities without a permit issued by the city manager or the city manager’s designee Director of Water Resources upon a finding that such city facilities will not be adversely affected by such construction or installation. (Ref: Section 29-29)

d) Maintenance

In accordance with city policy the developer is responsible for establishing proper connections with existing storm sewer lines and bears ultimate responsibility for the correction of any problems associated with that connection. (See Roadway and Utility Design Manual)

2) Additional Requirements

a) Parking Lot Construction and Paving

No new parking lot, loading dock construction, or the construction of similar structures or the grading/or paving of existing parking lots, loading docks, or similar structures may be undertaken until the developer obtains a permit from the city. The site must be inspected before, during and after construction. Any violation of the permit will result in permit revocation and cessation of construction until the violations are corrected.

b) Stormwater Management

The design, construction, and maintenance of stormwater improvements to meet the requirements of Sec. 30-1-1.1(A) must comply with the City of Greensboro Stormwater Management Manual the specifications and requirements of which are hereby adopted and made a part of this chapter as if set out in full.

c) Development Policy Manual

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d) Responsibility of Property Owner

It is the responsibility of the property owner to correct drainage controls on individual properties that do not function properly or are not constructed according to their design.

e) New Storm Drainage Design and Construction

All new storm sewer infrastructure must be constructed according to the City of Greensboro Storm Drainage Design Manual.

(Ord. No. 94-22, § 1, 5-2-94; Ord. No. 00-54, §§ 3–6, 4-4-09)
(A) Stormwater Management Control Requirements

1) Purpose
These stormwater management control requirements are intended to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased stormwater runoff associated with new development or redevelopment within the City of Greensboro. Additionally, this section requires development that drains in whole or in part to waters with special designation such as NSW or impaired waters assigned a Total Maximum Daily Load (TMDL) by North Carolina DWQ, to be designed using best management practices, up to and including the installation of engineered stormwater controls, that reduce nutrients or other pollutants of concern, to the maximum extent practicable, while still meeting other requirements of this section. Proper management of stormwater runoff, including the provision of stream buffers, will minimize damage to public and private property, promote a functional storm drainage system, reduce local flooding and drainage problems, and maintain, to the extent practicable, the pre-developed stormwater runoff characteristics of the developed site.

2) Applicability
The stormwater management control requirements of this subsection (30-1-1.1(A)) apply to the following type of developments.

a) All sites containing new development and/or redevelopment including grading, paving, gravel placement, and construction of buildings and other structures within the corporate limits and the extraterritorial jurisdiction of the City of Greensboro.

b) The construction and installation of new public improvements by federal, state or local government agencies shall comply with the provisions of this section to the extent that compliance is practicable unless the federal, state or local government agency has a National Pollution Discharge Elimination System (NPDES) stormwater permit that applies to the project site.

3) Participation in a Regional Stormwater Control Program

a) Where Permitted
Where a regional stormwater control program has been established by one or more local governments, or by an authority operating on behalf of one or more local governments, a development may participate in that regional program in lieu of any certification of runoff control required by this article, provided that all of the following conditions are met:

i)—Stormwater runoff from the development drains to an approved existing or proposed public regional stormwater control facility that is currently operational or will be operational within 2 years;

ii)—Participation is in the form of contribution of funds, contribution of land, contribution of stormwater management facility construction work, or a combination of these, the total value of which must be in accordance with a fee schedule adopted by the City Council; and

iii)—The Technical Review Committee finds that the stormwater management plan is in compliance with all other applicable requirements of this section.

b) Use-of-Contributions
Each contribution from a development participating in a regional stormwater control program must be used for acquisition, design, construction or maintenance of one or more such controls in the same watershed in which the development is located.

See Sec. 30-12-3.5

4) Stormwater Management Plan
See Sec. 30-12-3.6(3) 30-4-15.6(C)
5) Stormwater Quantity and Quality Improvements

a) Construction of Improvements—

i) The construction of all structural stormwater-management improvements, shown on an approved stormwater-management plan, must be substantially completed prior to final plat recording or issuance of any building certificate of occupancy. Upon approval by the Director of Water Resources, a surety for the completion of stormwater management improvements may be given to the City of Greensboro in order to record the final plat.

ii) Final approval of the installed stormwater-management improvements is required at the time of issuance of the final building certificate of occupancy. If neither a building permit nor a grading permit is required for a site, then the installation of the required structural stormwater-management improvements must be substantially completed or a surety for completion must be obtained prior to installation of any built-upon area on the site.

b) Recordation of Permanent Improvements—

i) All permanent engineered stormwater controls and associated access/maintenance easement(s) (specific or general, at the owner's option) shall be recorded on a Pond Plat, and a mechanism to ensure their maintenance shall be established concurrent with or prior to plat recordation and prior to the issuance of the final building certificate of occupancy.

ii) The DMUE shall be dedicated over and 15 feet around the stormwater device to ensure adequate access for maintenance purposes. When 15 feet is determined to be impractical, infeasible or unnecessary, the Director of Water Resources may approve an alternate means of maintenance access.

iii) If a stormwater device is located within a subdivision, the DMUE shall be located within the boundaries of the common elements.

c) Maintenance Responsibility—

i) When a stormwater management improvement serves more than 2 lots, a property owners' association is required to ensure ongoing maintenance. See Sec. 30-13.9.1. When the improvement serves fewer than 2 lots, a maintenance agreement may be used in lieu of an owners' association.

ii) The owner or owners' association is responsible for maintaining the completed stormwater management improvement as directed by the governmental office having jurisdiction for stormwater management or by the approved maintenance plan. If an owners' association is responsible for the maintenance of the stormwater management improvements such responsibility must be stated in the association declaration. An underground oversize storm sewer system which is approved through TRC for acceptance and maintenance by the city, carries public waters and is located either in the dedicated street right-of-way or drainage maintenance and utility easement is exempt from this requirement.

iii) The Director of Water Resources has the authority to inspect stormwater management improvements and to notify the responsible property owner or owners' association when maintenance or repairs are required. All required repairs and maintenance must be performed within 90 days after such notice. In case of failure by the responsible party to perform the required maintenance or repairs within the stated period, the city may perform such maintenance or repairs and recover all costs attendant thereto from the property owner or owners' association.

See Sec. 30-12-3.7
6) **Stream Protection Requirements**

a) **Stream Channelization/piping**

i) Perennial streams, as defined by the Stormwater Management Manual, within a designated water supply watershed may not be channelized or piped, except for channelization permitted pursuant to 30-12-3.9(C), Stream Channelization.

ii) Perennial streams that are outside of a designated water supply watershed and other streams that are not classified as perennial may be channelized or piped, but only after obtaining all applicable federal and state permits and certifications.

b) **Stormwater Management Stream Buffers**

A stream buffer is required for all open perennial streams, as defined by the Stormwater Management Manual, and all drainage channels draining an area equal to or larger than 50 acres. The buffer is subject to the requirements of Sec. 30-12-3.9.

See Sec. 30-12-3.9

7) **Stormwater Management Requirements**

a) Minimum stormwater management requirements for all new development and redevelopment must consist of runoff control measures necessary to control runoff to a level that will not cause increased off-site quantity problems as specified in 30-1-1.1(A)(7)b and 30-1-1.1(A)(7)c below.

b) **Quantity Control Requirements**

i) The engineer must provide a certification that the subject development or redevelopment would not cause increased off-site flooding, drainage, or erosion problems. Determination of impacts must be based on hydrologic and hydraulic engineering studies extending downstream to a point where the proposed site development or redevelopment represents less than 10% of the total drainage area or watershed. The studies must be based on an analysis of both 2- and 10-year storm events. (see Stormwater Management Manual).

ii) If it is determined that the development of the subject site does contribute to flooding, drainage or soil erosion problems at any location between the proposed development site and the 10% downstream point then stormwater quantity control improvements must be implemented. The stormwater quantity control improvements must limit the 2-year and 10-year post-development peak discharge rates to pre-development peak discharge rates, to minimize increased flooding, drainage, and erosion problems. These improvements may consist of nonstructural approaches such as natural swales, depressions in the land and other natural approaches, or structural approaches such as detention structures (wet and dry basins), extended detention facilities and alternative best management practices with provisions for stormwater quantity control. A combination of nonstructural and structural approaches is encouraged.

iii) For stormwater management improvements that are proposed to be implemented to meet the quantity control requirements of this section, a hydrologic-hydraulic analysis of the site drainage system in the pre-development condition and the post-development condition must be performed. The analysis should be included with the stormwater management plan and should demonstrate that the quantity control requirements stated in Sec. 30-1-1.1(A)(7)b will be achieved by the proposed improvements. These improvements are subject to review and approval by the Director of Water Resources.

c) Developments that meet the requirement for being identified as an integrated multiple use developments, planned unit developments, phased developments or group developments can meet the requirements of Sec. 30-1-1.1(A)(6) at the point the discharge leaves the overall property.
8) Master Plan Requirements
It is the intent of the City of Greensboro to produce stormwater quantity and quality management master plans to guide the design and development of the drainage system for all of the major sub-watersheds and watersheds in the city. Where such master plans are available and approved by the city council, site development projects are to conform to the stormwater management guidance and standards available in said master plans.

9) Additional Requirements
If site characteristics indicate that complying with the minimum stormwater management requirements of this section will not provide adequate designs or protection for local residents, and downstream property, it shall be the site designer's responsibility to exceed the minimum requirements as necessary.

10) Exempt Activities
The following activities are exempt from the requirements of Sec. 30-1-1.1(A)7). However, any restrictions upon building location, drainageways, pavement, or other built-upon area, or any other matter appearing on any previously approved development plan covering the subject property, shall be complied with unless and until replaced by an approved revised plan.

   a) Individual single-family housing on an individual lot.
   b) Replacement of existing built-upon area with like or lesser amount of new built-upon at the same location, or at a different location on the same zone lot if the Director of Water Resources has determined that equal or improved stormwater management will result.
   c) Placement of small accessory buildings or structures or small amounts of additional built-upon area provided that the total additional built-upon area is no greater than 400 square feet.
   d) Activities exempt from permit requirements of Section 404 of the Federal Clean Water Act, as specified in 40 CFR 232 are exempt from watershed requirements of this ordinance. Stream buffer requirements for ongoing farming and forestry activities will be implemented and enforced by the Division of Water Quality.

(Ord. No. 99-35, § 1, 3-16-99; Ord. No. 00-54, § 1, 4-4-00; Ord. No. 01-79, § 3, 4-3-01)

30-12-7.3 Illicit Discharges and Improper Disposal

(A) Prohibited Discharges

1) Illicit Connections

   a) It shall be unlawful to use any stream or watercourse to carry off water from any kitchen sink, bathtub or privy, or to carry off any fluid of an offensive or dangerous nature. No water or refuse from any industrial, commercial or institutional process, including uncontaminated water used for heating or cooling, shall be discharged in any stream or watercourse by any person until such person has obtained the appropriate local, state and federal permits.

   b) Street and Utility Construction

      i) Plans
      When required, construction and utility plans for all public or private street and water, sanitary sewer, and storm sewer facilities shall be submitted to the city following conditional approval or approval of the site plan. For each phase of the site plan, construction and utility plans shall include all improvements lying within or adjacent to that phase and all water, sanitary sewer, and storm sewer lines lying outside that phase and being required to serve that phase.

      ii) No construction Without Plan Approval
      None of the improvements listed above shall be constructed until the construction and utility plans for such improvements have been reviewed and approved by the city.
iii) **Inspections**
Work performed pursuant to approved construction and utility plans shall be inspected and approved by the city.

c) It shall be unlawful, willfully or negligently to injure, deface, mutilate, destroy, tamper or interfere with any city-owned property or any property used in the city's water, sanitary sewer or storm sewer, police or fire alarm system. (Ref: Section 18-2)

d) In accordance with city policy permits shall be required before the construction of any connection to the municipal separate storm sewer. (See City of Greensboro's *Roadway and Utility Design Manual*)

2) **Improper Disposal**
It shall be unlawful for any person to discharge non-stormwater to any stormwater conveyance with the exception of the following:

a) Water line flushing;

b) Diverted stream flows;

c) Rising ground waters;

d) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers;

e) Uncontaminated pumped ground water discharges from potable water sources;

f) Foundation drains;

g) Air conditioning condensation;

h) Irrigation water;

i) Springs;

j) Water from crawl space pumps;

k) Footing drains;

l) Lawn watering;

m) Car washing at one's residence, not for hire;

n) Flows from riparian habitats and wetlands;

o) Dechlorinated swimming pool discharges;

p) Street wash waters; and

q) Discharges from firefighting.

3) **Litter and Refuse Control**

a) It shall be unlawful to throw, place or deposit any refuse in any street, public place, on any private property, or in any conveyance within the city limits, except in garbage cans or garbage receptacles as provided in chapter 25, or as approved by the city manager or his designee Director of Water Resources. (Ref: Section 25-3(a))

b) It shall be unlawful for any person to throw any garbage, peelings or miscellaneous litter upon any of the sidewalks, greenways, or trails in the city or upon the floors of any churches, public halls, theaters, buses or other public places. It shall be unlawful for any person to place, drop or throw any litter, garbage, refuse, grass, shrubbery, tree clippings, bottles, cans, or containers or any kind upon any median strip, alleyway, street or street right-of-way, park or grass strip, or in any conveyance, or upon the private premises of another without permission of the owner or person in control of such premises, or upon any public property; provided, however, that the provisions of this section do not apply to those materials required to be placed for collection on the grass or park strip by chapter 10 of this Code. (Ref: Section 26-11)
4) Organic Waste

a) Loose leaves shall be collected at curbside by city forces from October 1 through the second Wednesday in January. All other times during the year, leaves shall be bagged or containerized in approved receptacles. (Ref: Section 25-32(c))

b) It shall be the duty of the property owner to keep leaves that have been piled for fall leaf collection out of the gutter, inlet, catch basin, or side ditch.

c) It shall be unlawful to place stumps or any organic materials on any property, public or private, except in those specific areas designated for such use by the city manager or his representative Director of Water Resources. (Ref: Section 26-3(b))

d) It shall be unlawful to place grass clippings, leaves, tree and shrub clippings, or any other yard wastes in any street, storm drain, stream, stormwater conveyance, or any other location where concentrated stormwater flows will wash such wastes into the storm sewers.

e) No privy, pigpen or stable of any kind shall be permitted to stand so near any stream, ditch, drain, or stormwater conveyance of any kind that the droppings therefrom will run into such stream, ditch, drain, or stormwater conveyance or in any way poison or contaminate the water therein; nor shall the urine from any privy be allowed to fall or be emptied into any stream, ditch, drain, or stormwater conveyance. (Ref: Section 18-5(d))

f) Every owner and/or person in possession of any premises across through which any stream or open ditch runs, or on which any body of water is impounded, shall keep the banks and edges of the stream, ditch or body of water free and clear of accumulations of debris which might block, hinder, or obstruct the natural flow of water in swales, streams, creeks, surface waters, ditches, or drains, to the extent that standing water is created on the premises.

(Ord. No. 94-22, §1, 5-2-94; Ord. No. 00-225, §2, 12-5-00)

(B) Spill Response

1) Purpose and Authority

The Greensboro Fire Chief or his designee shall have the authority to summarily abate, control and contain hazardous materials which are emitted into the environment in such a manner as to endanger the health or safety of the general public or the environment. The fire chief or his designee shall have the authority to enter public or private property with or without the owner's consent, to respond to such hazardous materials emergencies. The fire chief or his designee shall determine the type, amount and quantity of equipment and personnel required to adequately abate, control and contain all hazardous materials which are emitted into the environment. (Ref: Section 19-30)

2) Responsibility; Fees and Charges

a) The property owner and/or the person exercising control over the hazardous materials that create the hazardous material emergency shall be held financially liable for the response, control, containment, equipment, and materials costs incurred by the city fire department during the emergency. The property owner and/or person exercising control over such hazardous material, may provide personnel to assist abatement, removal and remedial measures, provided such personnel have been adequately equipped and trained pursuant to the requirements of state and federal laws. The City of Greensboro shall not be liable for the use of outside personnel. Assistance shall consist of any or all of the following:

i) Informing fire department personnel of all matters pertaining to the incident;

ii) Supplying emergency response plan information for the site;

iii) Supplying emergency response equipment, personnel and materials.

b) The city will charge for abatement, control and containment of hazardous material responses or fire incidents involving hazardous materials which accrue more than $100.00 in charges. In all cases the $100.00 of expenses shall not be charged to the person in default.
c) Charges for hazardous materials emergency response on behalf of the city by the fire department shall be based upon the following schedule:
   i) Engine response shall be $100.00 for each hour, or any part thereof.
   ii) Additional engine response shall be $100.00 for each hour, or any part thereof.
   iii) Hazardous materials unit response shall be $175.00 for the initial hour, or any part thereof, and $100.00 for each additional hour, or any part thereof.
   iv) Ladder truck response shall be $50.00 for each hour, or any part thereof.
   v) Squad truck response shall be $50.00 for each hour, or any part thereof.
   vi) Battalion chief response shall be no charge for the initial hour, $25.00 for each additional hour or any part thereof.
   vii) Any other actual costs of abatement, control and containment of the hazardous materials other than set out above.

d) Failure to pay the charges as assessed shall give the city a right to levy a lien upon the land or the premises where the hazardous material emergency arose and the levy shall be collected in the same manner as unpaid taxes pursuant to the authority of N.C.G.S. 160-A 193. (Ref: Section 10-31)

3) Fire Incidents Involving Hazardous Materials
   In fire incidents that involve hazardous materials or an exposure to hazardous materials, no fee will be assessed for resources normally associated with firefighting operations. Fees shall be assessed for those activities and resources (reference section 10-31) associated with the abatement, control and containment of the hazardous materials involvement or exposure which accrues more than $100.00 in charges. (Ref: Section 10-32)

(Ord. No. 94-22, § 1, 5-2-94)

30-12-7.4 Industrial and Related Facilities

(A) Review of Stormwater Pollution Prevention Plans
   The city may review the stormwater pollution prevention plans required under a facility's NPDES stormwater discharge permit when outfall monitoring or the illicit discharge/improper disposal program locates a suspected violator.

(Ord. No. 94-22, § 1, 5-2-94)

30-12-7.5 Construction Site Runoff

(A) Self Inspection Records
   The city's manager or his designee may review on request the self-inspection record required by the NPDES construction permit for sites with land-disturbing activity greater than 5 acres. Site operators who do not supply the requested information shall be reported to DENR for permit noncompliance.

(Ord. No. 94-22, § 1, 5-2-94)

(B) Runoff Control Structures
   Runoff control structures shall be constructed and maintained according to the specifications in the development ordinance (Chapter 30) and the North Carolina Erosion and Sediment Control Planning and Design Manual.

(Ord. No. 94-22, § 1, 5-2-94)

30-12-7.6 Enforcement

(A) Violations
   Any of the following shall be a violation of this chapter and shall be subject to the enforcement remedies and penalties provided by this article and by state law:
1) **Development Without Permit**  
To engage in any development, use, construction, remodeling, or other activity of any nature upon land or improvements thereon subject to the jurisdiction of this chapter without all required permits, certificates, or other forms of authorization as set forth in this chapter.

2) **Development Inconsistent With Permit**  
To engage in any development, use, construction remodeling or other activity of any nature in any way inconsistent with any approved plan, permit, certificate, or other form of authorization granted for such activity.

3) **Violation by Act or Omission**  
To violate, by act or omission, any term, variance, modification, condition, or qualification placed by the city council or its agent boards upon any required permit, certificate, or other form of authorization of the use, development, or other activity upon land or improvements thereon.

4) **Use in Violation**  
To erect, construct, reconstruct, alter, repair, convert, maintain, or use any building or structure or to use any land in violation or contravention of this chapter or any other regulation made under the authority conferred thereby.

5) **Continuing a Violation**  
To continue any of the above violations is a separate and distinct offense each day.

(Ord. No. 94-22, § 1, 5-2-94)

**[B] Civil Penalties**

1) **Illicit Connections**
   
a) Any person who is found responsible for an illicit connection shall receive a notice of violation when the connection is discovered. The person shall have 30 days to remove the connection. At the end of that time if the connection has not been removed, the city may enter the property and take measures necessary to remove the connection and perform whatever cleanup or abatement is necessary. If the person fails to remove the connection in the time prescribed, the city may petition the superior court of justice, for the issuance of an injunction to compel removal and payment; however, removal of the illicit connection shall be immediate upon the determination of the stormwater services division that the connection poses an imminent threat to public health.
   
b) If any person who previously has been found to have an illicit connection reconnects to the municipal separate storm sewer, he shall be assessed a civil penalty not to exceed $5,000.00. The penalty shall increase by 25% of the previous penalty amount for every subsequent illicit connection made by the same person. The penalty shall be additional to the cost of cleanup and abatement. Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.
   
c) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct. If the person has or is required to have a stormwater discharge permit from the state division of environmental management, the city shall alert the appropriate state authorities of the violation. In determining the amount of the penalty the city manager or his designee shall consider the following:
   
i) The degree and extent of the harm to the natural resources, to the public health, or to the public or private property resulting from the violation;
   
ii) The duration and gravity of the violation;
   
iii) The effect on ground or surface water quality or on air quality;
iv) The cost of rectifying the damage;
v) The amount of money saved by noncompliance;
vi) Whether the violation was committed willfully or intentionally;
vii) The prior record of the violator in complying or failing to comply with the stormwater quality management program; and
viii) The costs of enforcement to the City of Greensboro.

2) Improper Disposal

a) Process Wastewater

i) Any person who is found to have improperly disposed of process wastewater to the municipal separate storm sewer shall be assessed a civil penalty not to exceed $5,000.00. Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.

ii) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct. In determining the amount of the penalty the city manager or his designee Director of Water Resources shall consider the following:

a. The degree and extent of the harm to the natural resources, to the public health, or to the public or private property resulting from the violation;
b. The duration and gravity of the violation;
c. The effect on ground or surface water quality or on air quality;
d. The cost of rectifying the damage;
e. The amount of money saved by noncompliance;
f. Whether the violation was committed willfully or intentionally;
g. The prior record of the violator in complying or failing to comply with the stormwater quality management program; and
h. The costs of enforcement to the City of Greensboro.

b) Bulk Sales

i) Any person who is found to have improperly disposed of any substance that was purchased at a bulk sales location which, upon discharge to the municipal separate storm sewer system or drainage network, would have an adverse impact on water quality or cause the city to be in noncompliance with any applicable environmental permit shall be assessed a civil penalty not to exceed $5,000.00. Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.

ii) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct. In determining the amount of the penalty the city manager or his designee Director of Water Resources shall consider the following:

a. The degree and extent of the harm to the natural resources, to the public health, or to the public or private property resulting from the violation;
b. The duration and gravity of the violation;
c. The effect on ground or surface water quality or on air quality;
d. The cost of rectifying the damage;
e. The amount of money saved by noncompliance;
f. Whether the violation was committed willfully or intentionally;
g. The prior record of the violator in complying or failing to comply with the stormwater quality management program; and
h. The cost of enforcement to the City of Greensboro.

c) Household Products

i) Any person who is found to have improperly disposed of any substance that was purchased over-the-counter for household, in quantities considered normal for household purposes, which, upon discharge to the municipal separate storm sewer system or drainage network, would have an adverse impact on water quality or cause the city to be in noncompliance with any applicable environmental permit shall be assessed a civil penalty not to exceed $500.00. Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.

ii) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct. In determining the amount of the civil penalty the city manager or his designee Director of Water Resources shall consider the following:

a. The degree and extent of the harm to the natural resources, to the public health, or to the public or private property resulting from the violation;
b. The duration and gravity of the violation;
c. The effect on ground or surface water quality or on air quality;
d. The cost of rectifying the damage;
e. The amount of money saved by noncompliance;
f. Whether the violation was committed willfully or intentionally;
g. The prior record of the violator in complying or failing to comply with the stormwater quality management program; and
h. The costs of enforcement to the City of Greensboro.

d) Yard Waste

i) Any person who is found to have improperly disposed of leaves, grass clippings, or other yard wastes shall be assessed a civil penalty not to exceed $500.00. Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.

ii) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct. In determining the amount of the penalty the city manager or his designee Director of Water Resources shall consider the following:

a. The degree and extent of the harm to the natural resources, to the public health, or to the public or private property resulting from the violation;
b. The duration and gravity of the violation;
c. The effect on ground or surface water quality or on air quality;
d. The cost of rectifying the damage;
e. The amount of money saved by noncompliance;
f. Whether the violation was committed willfully or intentionally;
g. The prior record of the violator in complying or failing to comply with the stormwater quality management program; and
h. The costs of enforcement to the City of Greensboro.

e) Repeat Violation
   If a person is found to be responsible for more than one instance of improper disposal, the penalty shall increase by 25% of the previous penalty amount for each subsequent improper disposal.

f) Watershed Areas
   The penalty assessed for any of the above violations shall be increased by 25% of the amount assessed if it occurs in any designated water-supply watershed area.

g) Failure to Report
   The penalty assessed for any of the above violations shall be increased by 25% of the amount assessed for any spill not properly reported by the violator once he has knowledge of the violation.

3) In the event there are subsequent penalties assessed by the state against the city for improper disposal or illegal dumping, or illicit connection into the municipal separate storm sewer system as identified in Sec. 30-1-1.1(B), caused by any person, such person shall be assessed the equivalent amount of civil penalty.

(Ord. No. 94-22, § 1, 5-2-94; Ord. No. 04-169, §§1-6, 9-7-04)

(C) Public Nuisances

1) Nuisances
   The following enumerated and described conditions are found, deemed and declared to constitute a detriment, danger and hazard to the health, safety, morals, and general welfare of the inhabitants of the city and are found, deemed and declared to be public nuisances wherever the same may exist and the creation, maintenance, or failure to abate any nuisances is hereby declared unlawful. The natural conditions on lands dedicated to and/or accepted by the city as natural stream corridors, floodplain and/or open space which are established in order to preserve natural greenways, vegetative stream buffers, and/or natural connecting networks along floodways, streams, and creeks are deemed and declared as exceptions for the purpose of enforcement of this article.

a) Any condition which constitutes a breeding ground or harbor for rats, mosquitoes, harmful insects, or other pests.

b) A place of dense growth of weeds or other noxious vegetation over 12 inches in height.

c) An open place of concentration of combustible items such as mattresses, boxes, paper, automobile tires and tubes, garbage, trash, refuse, brush, old clothes, rags, or any other combustible materials or objects of a like nature.

d) An open place of collection of garbage, food waste, animal waste, or any other rotten or putrescible matter of any kind.

e) Hides, dried or green, provided the same may be kept when thoroughly cured and odorless.

f) Any furniture, appliances, or metal products of any kind or nature openly kept which have jagged edges of metal or glass, or areas of confinement.
g) Any condition which blocks, hinders, or obstructs in any way the natural flow of water in swales, streams, creeks, surface waters, ditches, or drains, to the extent that standing water is created on the premises.

2) Notice to Abate; Emergency Abatement by City
If any person shall violate the provisions of this section, it shall be the duty of the city manager or his designee Director of Water Resources to give notice to the owner or to any person in possession of the subject property directing that all unlawful conditions existing thereupon be abated within 10 days from the date of such notice; provided, that if, in the opinion of the city manager or his designee Director of Water Resources, the unlawful condition is such that it is of imminent danger or peril to the public, then an authorized public works representative may, without notice, proceed to abate the same, and the cost thereof shall be charged against the property.

3) Abatement by City Where Owner Fails to Abate
Upon the failure of the owner or person in possession of any premises to abate any unlawful condition existing thereupon within the time prescribed by the provisions of this section, it shall be the duty of an authorized public works representative to cause the removal and abatement of such unlawful condition therefrom.

(Ord. No. 94-22, § 1, 5-2-94; Ord. No. 00-225, § 3, 12-5-00)

(D) Remedies
Any or all of the following procedures may be used to enforce the provisions of this chapter:

1) Injunction
Any violation of this chapter or of any condition, order, requirement, or remedy adopted pursuant hereto may be restrained, corrected, abated, mandated, or enjoined by other appropriate proceeding pursuant to state law.

2) Civil penalties
a) Any person who violates any provision of this chapter shall be subject to the assessment of a civil penalty under the procedures provided in Sec. 30-1-1.1(B). Civil penalties assessed under this section are considered restorative; intended to provide compensation to the city for costs associated with the city's program to monitor, control, prosecute, cure and/or correct the violation. As such, the amount declared herein is presumed to provide sufficient restoration to the city for its costs.

b) The assessment of civil penalties herein is not intended to be an exercise of powers delegated to other agencies or entities created by the General Assembly to regulate the proscribed conduct.

3) Denial of Permit
The city manager or his designee Director of Water Resources shall withhold or deny any permit, certificate, or other authorization on any land, building, structure, or use in which there is an uncorrected violation of a provision of this chapter, or of a condition or qualification of a permit, certificate, or other authorization previously granted.

4) Conditional Permit or Temporary Certificate
The city manager or his designee Director of Water Resources may condition the authorization of any permit or certificate upon the correction of the deficiency, payment of civil penalties within a specified time, or the posting of a compliance security approved by appropriate government authority.

5) Revocation of Permit
The city manager or his designee Director of Water Resources may revoke and require the return of a permit or certificate by notifying the permit holder in writing, stating the reason for the revocation. Permits or certificates shall be revoked for any substantial departure from the approved application plans, or specifications; refusal or failure to comply with the requirements of state or local law; or for false statements or misrepresentations made in securing the permit or certificate.
Any permit or certificate mistakenly issued in violation of any applicable state or local law may also be revoked.

6) Criminal Penalties
Any violation of this chapter shall be a misdemeanor or infraction as provided by NCGS 14-4. Each violation shall be subject to a fine not to exceed $500.00.

7) Notification of the State Enforcement Officials

a) Industrial and Related Facilities
When a city manager or his designee, the Director of Water Resources, discovers an apparent violation of an industrial or related facility's NPDES stormwater discharge permit or that the facility is not operating pursuant to its stormwater pollution prevention plan, the city shall notify the appropriate state officials immediately.

b) Construction Sites
If the city manager or his designee Director of Water Resources discovers an apparent violation of the NPDES stormwater discharge permit required by the state for sites with land-disturbing activity greater than 5 acres, he shall report the violation immediately to the appropriate state officials.

c) Abatement
When the discharge from the facility interferes significantly with the municipal separate storm sewer, and the facility fails to take appropriate actions upon notification by the city, the city may take immediate and appropriate measures to control the problem whether or not the facility is violating its NPDES permit and recover the cost from the facility.

8) Judicial Enforcement
When any person is in violation of the provisions of this chapter, the city manager or his designee Director of Water Resources, through the city attorney, may petition the superior court of justice for the issuance of a restraining order or a preliminary and permanent injunction which restrains or compels the activities in question.

(Ord. No. 94-22, §1, 5-2-94; Ord. No. 04-169, § 7, 9-7-04)

30-12-7.7 Appeals

(A) Appeal Hearing
1) Any person assessed a civil penalty under this chapter shall have the right to a hearing before the stormwater services division upon making a written demand to the division specifying the issues to be contested, within 30 days following receipt of the assessment.

2) Unless such written demand is made within the time specified herein, the action shall be final and binding.

3) The stormwater services division shall make a final decision on the contested penalty within 30 days of the receipt of the written demand for a hearing.

4) The stormwater services division shall transmit a copy of the decision by registered or certified mail.

5) The decision of the stormwater services division shall be considered the final administrative action for the purposes of judicial review.

(Ord. No. 94-22, § 1, 5-2-94)

(B) Judicial Review
Any person may seek judicial review of a final administrative decision by the stormwater services division by filing a petition for writ of certiorari within 30 days after receipt of notice by registered or
certified mail, but not thereafter, with the Superior Court of Guilford County and with a copy to the City of Greensboro.

(Ord.-No.94-22, § 1, 5-2-94)

30-12-7.8 Service Charges and Rates

(A) Definitions for Rate Calculations
[The following definitions shall apply concerning rate calculations:]

Equivalent residential unit (ERU)  2,543 square feet of impervious surface.

Impervious surface. An area composed of any material that impedes or prevents natural infiltration of water into the soil. Impervious area shall include but is not limited to roofs, decks, driveways, patios, sidewalks, parking areas, tennis courts, concrete or asphalt streets, crushed stone and gravel surfaces.

Other property unit. A parcel of land that is not a single-family residential unit.

Single-family residential unit. A building detached from other structures used as a residence for 4 or fewer family units.

(Ord.-No.94-22, § 1, 5-2-94)

(B) Purpose of Service Charge
Stormwater management services shall be funded through the operation of a stormwater utility, as authorized by state law, and charges shall apply to all property within the city limits, without regard to ownership. Such charges shall be based on the presence of impervious surface on each parcel as determined by the unit standard set forth in Sec. 30-1-1.1(A). The city shall set a base rate for single-family residential units and calculate charges for other property units utilizing the equivalent residential unit as a multiplier.

(Ord.-No.94-22, § 1, 5-2-94)

(C) Rate for Service Charges

1) Single-family residential unit shall pay a fee based on the amount of impervious surface area on the property. The fee will be charged per month as shown below:

<table>
<thead>
<tr>
<th>Tier</th>
<th>Impervious Surface Range (Sq. Ft.)</th>
<th>Residential Rate (Monthly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>600-1,999</td>
<td>$1.50</td>
</tr>
<tr>
<td>II</td>
<td>2,000-2,899</td>
<td>$2.70</td>
</tr>
<tr>
<td>III</td>
<td>2,900+</td>
<td>$3.90</td>
</tr>
</tbody>
</table>

2) Other property shall pay a service charge of $2.70 per month for each equivalent residential unit or portion of an equivalent residential unit on the parcel. No charge shall be made on parcels with less than 600 square feet of impervious surface.

(Ord.-No.94-22, § 1, 5-2-94; Ord.-No.03-151, § 1, 6-17-03)

30-12-7.9 Annexation of Stormwater Sewers and Drainage Systems

Upon annexation of property that includes dedicated public streets containing storm sewers and other such stormwater drainage system, such storm sewer systems and features shall become the property of the city without cost to the city and shall be incorporated into the city storm sewer and drainage system as if they were originally constructed by the city.

(Ord.-No.94-22, § 1, 5-2-94)
Section 24. All ordinances in conflict with the provisions of this ordinance are repealed to the extent of such conflict.

Section 25. This ordinance shall become effective on December 1, 2010.

THE FOREGOING ORDINANCE WAS ADOPTED
BY THE CITY COUNCIL OF THE CITY OF GREENSBORO
ON THE 9th DAY OF NOVEMBER, 2010 AND WILL
BECOME EFFECTIVE UPON ADOPTION.

ELIZABETH H. RICHARDSON
CITY CLERK

APPROVED AS TO FORM

INTERIM CITY ATTORNEY
AMENDING CHAPTER 30 (UDO)
AN ORDINANCE AMENDING THE GREENSBORO CODE OF ORDINANCES
WITH RESPECT TO ZONING, PLANNING AND DEVELOPMENT

(Editor's Note: Added text shown with underlines and deleted text shown with strikethroughs.)

Section 1. That the entire content of Section 30-7-1.1 through 30-7-1.12 of the Greensboro Unified Development Ordinance, Water Supply Watershed and Other Watershed Districts, is hereby deleted in its entirety and a note is added to refer to Section 30-12-3, Water Supply Watershed and Other Watershed Districts of the Greensboro Land Development Ordinance for Water Supply Watershed and Other Watershed District Requirements.

Section 2. That the entire content of Section 30-7-2 of the Greensboro Unified Development Ordinance, General Watershed Areas (GWA) and Other Watershed Districts, is hereby deleted in its entirety and a note is added to refer to Section 30-12-5, General Watershed Areas (GWA) and Other Watershed Districts of the Greensboro Land Development Ordinance for Water Supply Watershed and Other Watershed District Requirements.

Section 3. That the entire content of Section 30-7-3 of the Greensboro Unified Development Ordinance, Watershed Critical Areas (WCA), is hereby deleted in its entirety and a note is added to refer to Section 30-12-4, Watershed Critical Areas (WCA) of the Greensboro Land Development Ordinance for Water Supply Watershed and Other Watershed District Requirements.

Section 4. That Section 30-3-9.3, Default of Section 30-3-9, Sureties or Improvement Guarantees, is modified to read as follows:

30-3-9.3. Default:

a) Public Improvements
All developments whose public improvements are not completed and accepted thirty (30) days prior to the expiration of the financial guarantee shall be considered to be in default. Upon default the surety bonding company or the financial institution holding the escrow account shall, if requested by the City, pay to it all or any portion of the bond or escrow fund in an amount deemed necessary by the City to complete the improvements. Upon payment, the City shall expend such funds, or portion thereof, to complete all or any portion of the required improvements. The City shall return any funds not spent in completing the improvements. Default on a project does not release the developer from liability and responsibility for completion of the required improvements.

b) Private Improvements (engineered stormwater controls or other improvements to remain privately owned)
All developments whose private improvements are not completed and accepted thirty (30) days prior to the expiration of the financial guarantee shall be considered to be in default. Upon default the surety bonding company or the financial institution holding the escrow account shall, if requested by the City, pay to it all or any portion of the bond or escrow fund in an amount deemed necessary by the City to have the improvements completed. Upon payment, the City shall require completion of all required improvements and shall use such funds or portion thereof from the bond or escrow account to reimburse costs for all or any portion of the required improvements. The City shall return any funds not spent in completing the improvements. Default on a project does not release the original subdivider or developer and all subsequent subdivider and developers from liability and responsibility for completion of the required improvements.
Section 5. All ordinances in conflict with the provisions of this ordinance are repealed to the extent of such conflict.

Section 6. This ordinance shall become effective on December 1, 2010.

THE FOREGOING ORDINANCE WAS ADOPTED
BY THE CITY COUNCIL OF THE CITY OF GREENSBORO
ON THE 9th DAY OF NOVEMBER, 2010 AND WILL
BECOME EFFECTIVE UPON ADOPTION.

ELIZABETH H. RICHARDSON
CITY CLERK

APPROVED AS TO FORM

INTERIM CITY ATTORNEY
AMENDING CHAPTER 27
AN ORDINANCE AMENDING THE GREENSBORO CODE OF ORDINANCES
WITH RESPECT TO STORMWATER MANAGEMENT

(Editor’s Note: Added text shown with underlines and deleted text shown with strikethroughs.)

Section 1. That Chapter 27 Stormwater Management Ordinance of the Unified Development Ordinance is deleted in its entirety and a note is added to refer to Section 30-12-7 of the Land Development Ordinance for Stormwater Management Requirements.

Section 2. All ordinances in conflict with the provisions of this ordinance are repealed to the extent of such conflict.

Section 3. This ordinance shall become effective on December 1, 2010.

THE FOREGOING ORDINANCE WAS ADOPTED
BY THE CITY COUNCIL OF THE CITY OF GREENSBORO
ON THE 9th DAY OF NOVEMBER, 2010 AND WILL
BECOME EFFECTIVE UPON ADOPTION.

ELIZABETH H. RICHARDSON
CITY CLERK

APPROVED AS TO FORM

INTERIM CITY ATTORNEY