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## **PURPOSE**

Guilford County has adopted flood damage prevention regulations to minimize public and private losses due to flood conditions in areas subject to periodic flooding and to permit only that development within the floodplain areas which is appropriate in light of the probability of flood damage. Floodplain development permits are used to track development within the areas of special flood hazard located throughout Guilford County and to ensure compliance with National Flood Insurance Program regulations.

Section 7-5 (Flood Damage Prevention) of the Guilford County Development Ordinance contains the specific regulations pertaining to floodplain development and flood protection.

## **DEFINITIONS**

The following terms are used throughout the flood damage prevention regulations and discussions relating to floodplain development permits.

“Base Flood” means the flood having a one (1) percent chance of being equaled or exceeded in any given year. This is often referred to as the 100-year flood.

“Basement” means any area of the building having its floor subgrade (below ground level) on all sides.

“Certificate Of Floor Elevation / Flood Proofing” means a certificate prepared by a registered land surveyor or registered professional engineer certifying the finished elevation of the lowest floor, flood proofed elevation, or the elevation of the bottom of the lowest floor, whichever is applicable, as built in relation to mean sea level.

“Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

“FEMA” means Federal Emergency Management Agency responsible for producing flood insurance studies, flood insurance rate maps, and assisting local governments in evaluating no-rise certifications.

“Floodplain Development Permit” means a permit issued by the Planning and Development Department allowing development of property that has an area of special flood hazard on it.

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

“Floodway Fringe” means the land area located between the floodway and the outer edge of the 100-year floodplain.

“Lowest Floor” means the subfloor, top of slab or grade of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.



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"No-Impact Certification" means a certification signed and sealed by a registered professional engineer with supporting technical data stating that the proposed development will not change the pre-project base flood elevations, floodway elevations, or floodway widths.

"Non-Encroachment Area" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.

"Special Flood Hazard Area (SFHA)" is the land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year.

### **PERMIT REQUIRED**

A floodplain development permit is required before undertaking any development on properties containing an area(s) of special flood hazard (mapped 100-year floodplain). The information required to obtain a permit is completed on the Floodplain Development Permit Application and consists of the following:

- Site address.
- Tax map, block and lot number.
- Zoning and overlay districts.
- Owner's name, address, and phone.
- Plat book, page and lot number or deed book and page.
- Nature of development
- Site plan, plot plan or grading plan showing proposed development and floodplain.

If the proposed development is not located within the actual area of special flood hazard then a separate permit will not be issued and no fee will be charged. The floodplain development permit will be a note in the comment area of the building permit or the grading permit that is being applied for. An elevation certificate is required to be submitted prior to issuance of a certificate of occupancy for a building in these cases.

When the proposed development is located within the floodway fringe of the area of special flood hazard, then a separate floodplain development permit will be issued in the form of a land-use occupancy permit and a \$35.00 permit fee is collected. An elevation certificate is required to be submitted prior to issuance of a building permit and an as-built elevation certificate is required prior to issuance of a certificate of occupancy for a building in these cases.

### **FLOODWAY DEVELOPMENT**

When development is proposed within the floodway of an area of special flood hazard, then a floodplain development permit will be required similar to that described for development in the floodway fringe. Development within the floodway also requires a "no-impact" certification stating that the proposed development will not impact the pre-development base flood elevations, floodway elevations or floodway data widths. The certification shall be signed, sealed, and dated by a registered professional engineer. The "no-impact" certification shall be submitted with supporting technical data that shall include, but not be limited to the following:

- a. Duplicate of the original Flood Insurance Study (FIS) step-backwater model printout or floppy disk.
  - b. Revised existing conditions step-backwater model.
  - c. Proposed conditions step-backwater model.
  - d. Flood Insurance Rate Map (FIRM) and topographic map, showing floodplain and floodway, the additional cross-sections, the site location with the proposed topographic modifications superimposed onto the maps, and
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a photocopy of the effective FIRM showing the current regulatory floodway.

- e. Documentation clearly stating the analysis procedures. All modifications made to the original FIS model to represent revised existing conditions, as well as those made to the revised existing conditions model to represent proposed conditions, should be well documented and submitted with all supporting data.
- f. Copy of the effective Floodway Data table copied from the FIS report.
- g. Statement defining source of additional cross-section topographic data and supporting information.
- h. Cross-section plots, of the added cross-sections, for revised existing and proposed conditions.
- i. Certified planimetric (boundary survey) information indicating the location of structures on the property.
- j. Copy of the microfiche, or other applicable source, from which input for the original FIS HEC-2 model was taken.
- k. Floppy disk with all input files.
- l. Printout of output files from EDIT runs for all three floodway models.

The engineering "no-impact" certification and supporting technical data must stipulate no impact on the 100-year flood elevation, floodway elevations or floodway widths at any new cross-sections and at all existing cross-sections anywhere in the model. Therefore, the revised computer model should be run for a sufficient distance (usually one mile) upstream and downstream of the development site to insure proper analysis. Once a "no-impact" certification and supporting technical data are received they will be reviewed for completeness and then forwarded to the Federal Emergency Management Agency (FEMA) regional office for review and recommendations. The applicant is responsible for all fees involved in this review. The "no-impact" certification will be verified and approved prior to issuance of any permit for development in the floodway.

**FOR ASSISTANCE**

Copies of the Flood Insurance Rate Maps for unincorporated Guilford County are available for inspection in the Planning and Development Department.

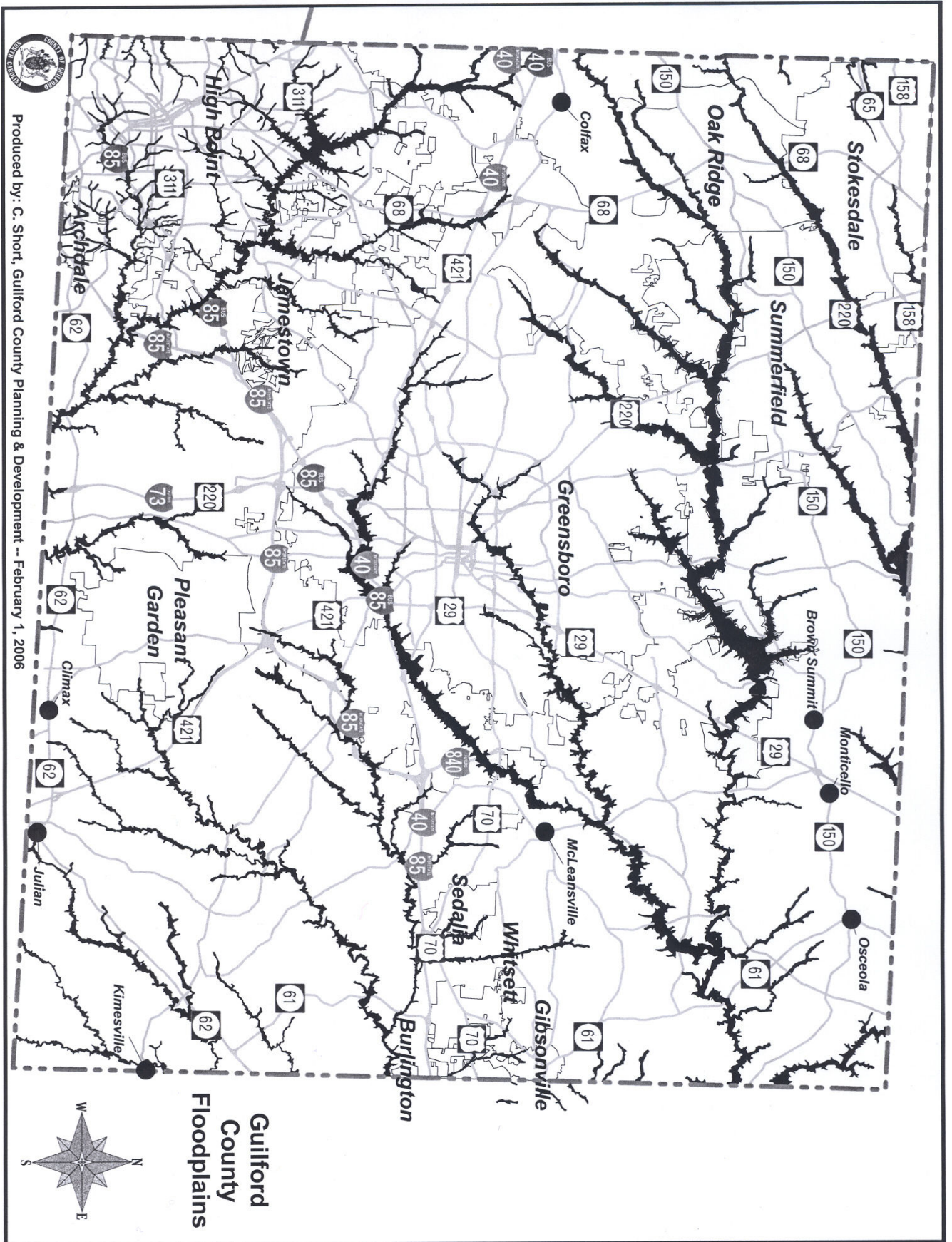
Planning staff can assist you in determining permit requirements and fees required for your proposed development plans. Detailed questions should be directed to the Guilford County Watershed Protection Engineer.

This Bulletin is intended for public information purposes only. It is not to be construed or used as an official Development Ordinance interpretation in any legal proceeding.



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Produced by: C. Short, Guilford County Planning & Development -- February 1, 2006