

# Pender County Planning and Community Development

## Planning Division

805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425



Phone: 910-259-1202  
Fax: 910-259-1295  
[www.pendercountync.gov](http://www.pendercountync.gov)

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## Stormwater Regulation Administration Zoning Text Amendment

**Case Number:** ZTA 2024-25

**Application Type:** Zoning Text Amendment

**Applicant:** Pender County Planning & Community Development

**UDO Section to be Amended:** 7.9(D)(1)(i), Stormwater Management, Design Standards

**Description:** Pender County Planning & Community Development, applicant is requesting to remove the word “not” from a sentence in Article 7.9. This would result in calculations and specifications for a proposed development’s stormwater management design to be submitted, whereas it has previously not been required.

### **Board of County Commissioners/Planning Board Meeting**

PB: 5/7/2024, BOCC: 6/17/2024

**Included:** Application, Narrative, Proposed Amended Text

# **APPLICATION**

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## Zoning Text Amendment Submission

Applications will be considered for review by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. N/A **Pre-submittal Meeting**  
Date of Meeting \_\_\_\_\_
2. Yes **Signed Application**
3. N/A **Payment**  
\$250
4. Yes **Narrative**  
A letter describing, in detail the intent and purpose of the amendment presented, meeting the approval criteria set forth in Section 3.18.5 of the Pender County UDO.
5. Yes **Digital Submission**  
For all documents submitted in paper copy, provide a version. These may be emailed or uploaded to a share folder. Physical media such as CD or USB drives will not be accepted.

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant 

Date 4/12/2024

Printed Name Daniel Adams

Staff Initials:	_____
Date:	_____

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## **TEXT AMENDMENT**

A request to amend the text of this Ordinance may be initiated by the County Commissioners, Board of Adjustment, Planning Board, Administrator, or a citizen of Pender County.

### **Approval Criteria** (*Section 3.18.5*)

In evaluating any proposed ordinance text amendment, the Planning Board and the County Commissioners shall consider the following:

- a. The extent to which the proposed text amendment is consistent with the remainder of the Ordinance, including, specifically, any purpose and intent statements;
- b. The extent to which the proposed text amendment represents a new idea not considered in the existing Ordinance, or represents a revision necessitated by changing circumstances over time;
- c. Whether or not the proposed text amendment corrects an error in the Ordinance; and
- d. Whether or not the proposed text amendment revises the Ordinance to comply with state or federal statutes or case law.
- e. In deciding whether to adopt a proposed Ordinance text amendment, the central issue before the County Commissioners is whether the proposed amendment advances the public health, safety or welfare and is consistent with any adopted County Land Use Plan documents, the CAMA Land Use Plan, and the specific intent of this Ordinance.

### **Action by the Planning Board**

1. Before making any recommendation on a text amendment, the Planning Board shall consider any recommendations from the Administrator and shall conduct a public hearing where interested parties may be heard.
2. The Planning Board shall make a recommendation based on the approval criteria.
3. The Planning Board shall make its recommendation following the initial public hearing.

### **Action by County Commissioners**

1. Before taking action on a text amendment, the County Commissioners shall consider the recommendations of the Planning Board and Administrator and shall conduct a public hearing.
2. The County Commissioners shall make a decision based on the approval criteria.
3. Following the public hearing, the County Commissioners may approve the text amendment, deny the amendment, or send the amendment back to the Planning Board or a committee of the County Commissioners for additional consideration.

**In deciding whether to adopt a proposed Ordinance text amendment, the central issue before the County Commissioners is whether the proposed amendment advances the public health, safety or welfare and is consistent with any adopted County Land Use Plan documents, the CAMA Land Use Plan, and the specific intent of this Ordinance.**

# APPLICATION FOR TEXT AMENDMENT

## THIS SECTION FOR OFFICE USE

<b>Application No.</b>	<b>ZTA</b>	<b>Date</b>	
<b>Application Fee</b>	<b>\$</b>	<b>Invoice Number:</b>	
<b>Pre-Application Conference</b>		<b>Hearing Date</b>	

### SECTION 1: APPLICANT INFORMATION

<b>Applicant's Name:</b>	Pender County Planning & Community Development
<b>Applicant's Address:</b>	805 S. Walker Street
<b>City, State, &amp; Zip</b>	Burgaw, NC 28425
<b>Phone Number:</b>	910-259-1202
<b>Email Address:</b>	dadams@pendercountync.gov

### SECTION 2: UDO TEXT TO BE AMENDED

Current Text to be Amended (Please site accurate Article number referenced):

Article 7.9 Stormwater Management

Section D - Design Standards, 1) New Development Projects Requiring a NCDEQ Stormwater Permit, e) Plan Submittal Requirements, i)

Remove the word "not" from the sentence that reads, "Calculations and specifications are not required to be submitted."

Proposed Text to be added:

No text to be added.

### SECTION 3: SIGNATURE

<b>Applicant's Signature</b>		<b>Date:</b>	4/12/2024
<b>Applicant's Printed Name</b>	Daniel Adams	<b>Date:</b>	4/12/2024

### NOTICE TO APPLICANT

If the applicant makes significant changes to the application for a text amendment after the Planning Board has made its recommendation, the Administrator may refer the modified request back to the Planning Board for an additional public hearing.

### TEXT AMENDMENT CHECKLIST

<input type="checkbox"/>	Signed application form
<input type="checkbox"/>	Application fee
<input type="checkbox"/>	A letter describing, in detail the intent and purpose of the amendment presented, meeting the approval criteria set forth in Section 3.18.5 of the Pender County UDO (shown on page 1 of this application)

### Office Use Only

<input type="checkbox"/> <b>ZTA Fees:</b> \$250		<b>Total Fee Calculation:</b>	
<b>Payment Method:</b>	<b>Cash :</b> <input type="checkbox"/> \$ _____	<b>Credit Card:</b> <input type="checkbox"/> Master Card <input type="checkbox"/> Visa	<b>Check:</b> <input type="checkbox"/> Check # _____
Application Received By:		Date:	
Application completeness approved by:		Date:	
Dates Scheduled for Public Hearings:	<input type="checkbox"/> Planning Board:	<input type="checkbox"/> BOC:	

**NARRATIVE**

# Pender County Planning and Community Development

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## ZTA 2024-25 Text Amendment Narrative

Pender County Planning & Community Development staff are submitting a text amendment to modify the County's Unified Development Ordinance (UDO). Specifically, the request is to remove one word within the last sentence within Article 7.9.D.1.e.i., which reads, "All details of the stormwater collection, retention and discharge systems shall be included on the plans including pipe sizes, locations of all structures and devices, all proposed inverts and grades and any other typical details required to construct the system. Calculations and specifications are not required to be submitted." The proposed text amendment removes the word "not" from the last sentence in that paragraph, which reads, "Calculations and specifications are *not* required to be submitted."

Staff is requesting this text amendment because we now have an engineering firm that conducts plan review as part of our technical review of development proposals. The ability of the engineering firm to provide a detailed analysis of the plans is limited if the supporting calculations and specifications are not required to be submitted. The intent of this amendment to the UDO, and the intent of hiring the engineering firm to participate in our technical review process, is to ensure that all stormwater systems are designed and installed to be compliant with the County's development requirements.

The attachment shows the language staff is proposing to remove in red and struck-through.

Sincerely,

Daniel Adams  
Planning & Community Development Director

**PROPOSED TEXT TO  
BE AMENDED**

## 7.9 STORMWATER MANAGEMENT

### A. Applicability

- 1) This ordinance shall be applicable to all new development projects from the date of the adoption of this ordinance that fit the following criteria.
  - a) New development of any tract of land or subdivision that requires a North Carolina Department of Environmental Quality (NCDEQ) Stormwater Permit.
- 2) Pre-development Exclusion
  - a) Any project or part of a project area that is granted a pre-development exclusion by the NCDEQ from having to obtain a standard NCDEQ stormwater permit requiring the project meet existing rules and regulations is excluded in whole or in part from this rule in accordance with the exclusion granted by NCDEQ.

### B. Definition of Terms

- 1) NCDEQ – The North Carolina Department of Environmental Quality
- 2) NCDOT - The North Carolina Department of Transportation
- 3) PCPD – Pender County Planning Department
- 4) NOAA – National Oceanic and Atmospheric Administration
- 5) Time of Concentration – The calculated time of travel for runoff to flow across a project area from the farthest distance from the outfall to that outfall, expressed as a unit of time.
- 6) Peak Flow – The calculated maximum flow generated by a specific design storm as calculated by the rational method or other industry standard methodologies, expressed in cubic feet per second.
- 7) Impervious Surface - Any structure, surface, or improvement that reduces or prevents absorption of stormwater into land, and includes non-permeable pavement structures, sidewalks, rooftops or any other structure or improvement that impedes rainfall from entering the ground surface.
- 8) Pervious Surface – Any bare or vegetated soil or surface that allows the penetration of rainfall. This includes permeable pavement structures, drip through decks not covered by a roof structure, gravel surfaces meeting the standard of pervious surfaces as described by NCDEQ.
- 9) Post Development – Site conditions including impervious surface coverage that exist after the proposed development has occurred.
- 10) Pre- Development – Site conditions that exist prior to the proposed land development.
- 11) Design Storm – A specified storm event consisting of the return period, expressed in years.
- 12) Rainfall Depth – The depth of a specific storm event, expressed in inches.
- 13) Intensity – The rate at which rain falls, expressed in inches per hour.
- 14) Design Storm Duration – The length of time over which a storm event occurs, expressed in units of time.
- 15) Design Storm Return Period – The statistically expected occurrence of a given storm event, expressed in years.
- 16) High Density Projects – Projects deemed to be high density by NCDEQ standards.
- 17) Low Density Projects – Projects deemed to be low density by NCDEQ standards.

18) Storm Event – Precipitation greater or equal to a rainfall depth of .1 inches occurring in a continuous single time frame.

C. Administration

1) These regulations are adopted pursuant to the authority vested in the County of Pender by its charter and the General Statutes of North Carolina, particularly Chapter 153A, 160D, and Chapter 340.

D. Design Standards

1) New Development Projects Requiring a NCDEQ Stormwater Permit

a) Pre-Development and Post Development Peak Flow Comparisons for Design Storm Events.

i) All projects shall be designed so that the post development runoff from the project be no more than ten (10) percent more than the pre- development runoff.

ii) Low density projects shall meet this requirement for the 1 year 24-hour event or demonstrate that stormwater discharge is through multiple outlets with each not exceeding a flow of over 50% of the total predevelopment flow. High density projects shall meet this requirement for the 10 and 25 year return period events and be analyzed for the 50-year event.

iii) Peak flows shall be calculated using the rational method or other industry standard methods for doing so.

iv) For high density projects the time of concentration for pre- and post-development shall be calculated for each storm event using standard methods as set out in TR-55 or other industry standard methodology. These time of concentrations shall be used to determine the duration for each storm event which will yield the intensity used to calculate peak flows for each individual event.

v) All rainfall data for rainfall depth and intensity shall be determined by the National Oceanic and Atmospheric Administration (NOAA) for the specific project location.

vi) For low density projects or projects that do not require detention of stormwater, the sum of all outfalls shall be used to determine the post development peak flow.

vii) For projects with detention structures, the post development flow will be calculated using industry standard methods to route storm events through the detention device to illustrate the compliance with the pre and post development requirements. These calculations shall provide outlet structure details along with the retention basin geometry and peak stage calculations for each storm event.

viii) All NCDEQ stormwater requirements shall apply.

b) On-Site Collection System Requirements

i) All stormwater collection and conveyance systems shall convey the runoff from the 10-year storm event.

ii) All other project areas including parking lots and green spaces shall be designed to limit ponding of water during the 10-year event.

c) Low Impact Development (LID) design strategies shall be encouraged to reduce peak flows. LID devices shall be designed according to NCDEQ requirements using industry standard methodology.

d) Off-Site Runoff

- i) Runoff that is tributary to the project area but is not generated on the project may be bypassed around the collection, conveyance and treatment systems and discharged. Off-site runoff that is not bypassed must be accounted for in the calculations for conveyance systems, retention systems and pre- and post-development calculations.
- ii) Conveyances for off-site runoff shall be designed for the 10-year event.
- e) Plan Submittal Requirements
  - i) All details of the stormwater collection, retention and discharge systems shall be included on the plans including pipe sizes, locations of all structures and devices, all proposed inverts and grades and any other typical details required to construct the system. Calculations and specifications are ~~not~~ required to be submitted.
  - ii) The plans shall include a statement that the proposed system meets the criteria of this ordinance.
  - iii) The plans shall be signed, dated and sealed by a NC licensed design professional in accordance with industry standards for doing so. Plans may be marked preliminary or with other indications that they are for review and permitting.
  - iv) All Plans shall be produced on D – size drawing sheets (24" x 36") at an appropriate and legible scale.
  - v) Typical industry standards of care shall be used in the design, analysis and preparation of plans in accordance with rules and requirements of the applicable licensing board.
- f) Plan Certification Requirements
  - i) Upon completion of the construction of the stormwater control system in part or in phases a design certification letter shall be submitted to the Pender County Planning Department (PCPD) stating that the system was installed in accordance with the plans. Any discrepancies from the original design shall be noted. The certification shall include a statement that the system, as installed, meets the requirements of this ordinance.
  - ii) If the system installation differs from the proposed plans a record drawing showing all discrepancies shall be submitted to the PCPD.

E. Design Professional Requirements

- 1) All stormwater analysis, design and preparation of plans shall be performed by or under the direct supervision of a NC licensed professional. A NC licensed professional is considered any individual licensed by the State of North Carolina to perform such work as defined by their respective licensing board. The design professional shall date, sign and seal all design documents according to the requirements and standards as set out by their licensing board.
- 2) Typical industry standards of care shall be used in the design, analysis and preparation of plans in accordance with rules and requirements of the applicable licensing board.