Narrative for Drainage System Review Downstream of a Townhome Project Proposed at 5308 Carolina Beach Road

The project proposes to develop ninety-five (95) townhome units with associated parking and other improvements. An existing drainage system flows through the tract from the Southeast and into the Marquis Hills neighborhood. This area is within the Motts Creek watershed which flows into the Cape Fear River.

The attached map shows the project location and a general routing of the drainage downstream of it. The system flows primarily in open ditches, but is piped under any road crossings. Those pipe crossings are under the control of NC Department of Transportation, and it is their responsibility to maintain them. Issues of blockage are normally identified by registered complaints, and work orders are created for remedying the problem.

Maintenance of the open ditches that run over the privately-owned property are currently the responsibility of those individual owners, as defined on the NHCo Stormwater flyer. The following pictures show the varying condition of the ditches along the reviewed system. Good maintenance of the ditches translates into better flow and greater capacity during heavy rain events.

New Hanover County is regulated by a Stormwater Ordinance.

Sec. 23-284. - Purpose.

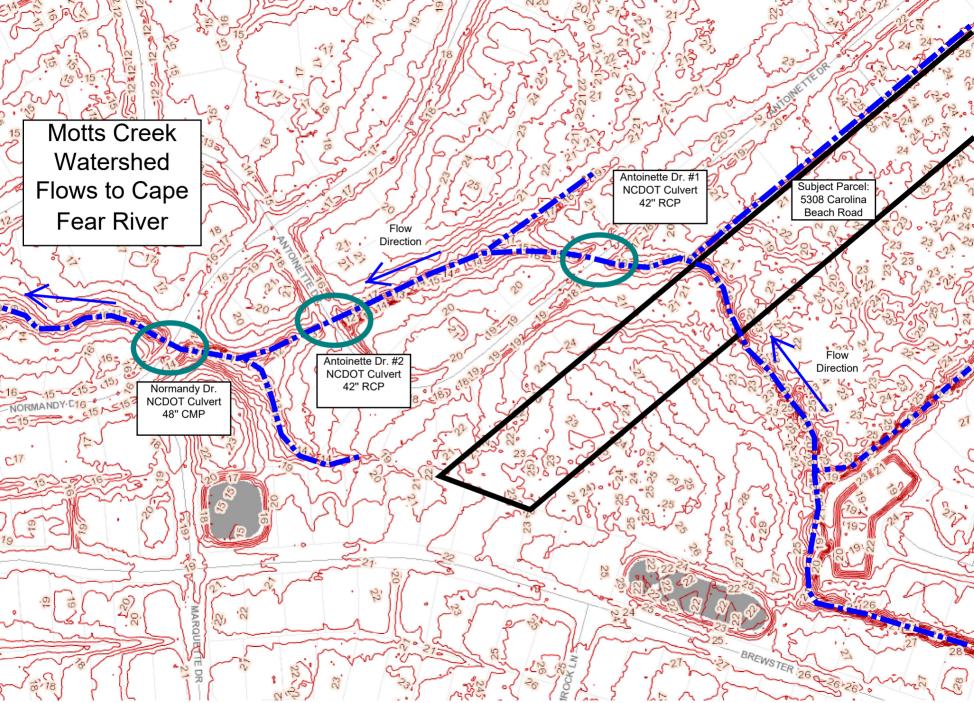
The purpose of this article is to protect and promote the public health, safety and general welfare, and to safeguard the natural and manmade resources of the county by regulating stormwater runoff. This purpose is accomplished by imposing conditions and requirements upon existing and proposed development activities, and by establishing procedures by which these requirements and conditions are to be administered and enforced.

Any current development project must be designed and permitted prior to construction release, and meet specific criteria.

Sec. 23-343. - New development.

It is the policy of the county that all land within the unincorporated areas of the county to be developed, shall have sufficient stormwater management controls to provide adequate protection of life, property and natural resources. To this end, as a minimum, all land disturbing activity subject to this article, shall provide sufficient management of post-development runoff from the two-year, ten-year and 25-year frequency storms such that the discharge rates of post-development stormwater runoff do not exceed the pre-development rates.

Development of the proposed project will include a stormwater management pond that will be designed and built to all regulations. Continued maintenance of the pond will initially be the responsibility of the developer, and then will be turned over to a Homeowners' Association at the completion of the project.



THE FOREGOING CERTIFICATE OF MARILIA IN MCKOU NOTARY PUBLIC OF NEW HANDVER COUNTY, IS CERTIFIED TO BE CORRECT THIS THE \$5		
LOIS C. LE PAY, REGISTER OF DEEDS BY Loi M. Helland, Wep		
CERTIFICATE OF REGISTRATION BY REGISTER OF DEEDS		
MORTH CAROLINA NEW HANOVER COUNTY: 8		
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JACK G. STOCKS, A REGISTERED LAND SURVEYOR BEING DULY SWORN SAYS THAT THIS MAP WAS MADE BY HIM FROM AN ACTUAL SURVEY DURING NOV. 1970 AND THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47.30 AS AMENDED THAT THE ERROR OF CLOSURE AS CALCULATED BY LATITUDES AND DEPARTURES IS 1: 5000 + THAT THIS MAP IS TRUE AND CORRECT TO THE BEST OF HIS KNOWLEDGE AND BELIEF. AND CORRECT TO THE BEST OF HIS KNOWLEDGE AND BELIEF.	(FUTURE DEVELOPMENT)	LOCATION MAP
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THIS IS TO CERTIFY THAT ALL STREETS AND STREETS DRAINAGE PLANS IN THE SECTION & MARQUIS HILLS SUBDIVISION HAVE BEEN EXAMINED AND FOUND TO COMPLY WITH THE SPECIFICATIONS OF THE NORTH CAROLINA STATE HIGHWAY COMMISSION.	035.56:45 IV. M. A.	Drainage flow is within
DATE DISTRICT ENGINEER, N.C.S. H.C. (See Setter on file) CERTIFICATE OF APPROVAL OF WATER SUPPLY AND SEVAGE DISPOSAL SYSTEM	NTG 250 JUNE 12 140 13.71 15 140 13.71 15 15 15 15 15 15 15 15 15 15 15 15 15	Recorded HORNE
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DATE CHAIRMAN, PLANNING COMMISSION	13/3/23 6/4 125 0 126.0' 126 126 126 126 126 126 126 126 126 126	187 187 189 189 189 189 189 189 189 189 189 189
CERTIFICATE OF APPROVAL BY BOARD OF COUNTY COMMISSIONERS	15.0' /4 130.57' \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	2 106.0' \(\frac{1}{2} \) 2 203.89' \(\frac{1}{15.35'} \) \(\frac{1}{2} \) 06.0' \(
APPROVED BY THE NEW HANOVER COUNTY BOARD OF COMMISSIONERS PROVIDED THAT THIS PLAT IS RECORDED WITHIN NINETY (90) DAYS OF FINAL APPROVAL.		
PATE 1970 CHAIRMAN CHAIRMAN		
CERTIFICATE OF OWNERSHIP, DEDICATION AND JURISDICTION	SECTION 6	
I (IVE) HEREBY CERTIFY THAT I (IVE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (IVE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT ESTABLISH THE MINIMUM BY I DING	MARQUIS	
LINES AND DEDICATE ALL STREETS, ALLEYS WALKS, PARKS AND PRIVATE USE AS NOTED, I (IVE) ALSO CERTIFY THAT THE LAND SHOWN ON THIS PLAT FALLS WITHIN THE SUBDIVISION JURISDICTION OF NEW HAHOVER COUNTY,	FEDERAL POINT TOWNSHIP NEW HANOVER COUNTY NORTH	H CAROLINA
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NOTES: ALL STREET RIGHT OF WAYS 60.0'IN WIDTH UNLESS OTHERWISE	SCALE IN FEET 100 0 100 200 300 400	500
MINIMUM BUILDING LINES 25.0' FROM FRONT STREET LINE.		
	STOCKS & MATRICE MINING	
	SURVEYING & ENGINEERING MICH	



Stormwater

Drainage Easements

New Hanover County



PROPERTY OWNER RESPONSIBILITY FOR STORM WATER CONVEYANCE.

It shall be the **responsibility of individual property owners** of developed or undeveloped land within the unincorporated areas of the county, to maintain stormwater conveyance facilities, such as waterways, streams, creeks, ditches, swales, channels, canals, conduits and culverts, and stormwater control facilities, such as ponds and lakes **within their property**. Where conditions of existing stormwater facilities are determined to be deficient and a public nuisance, and the property owner fails to correct the deficiencies after being notified by the county, the county may arrange for the deficiencies to be corrected and recover all costs thereto from the property owner.

Owner/ Developer/ Home Builder shall not:

- Construct fences, buildings, structures, electrical boxes, light poles, HVAC units, etc. within a drainage easement.
- Plant trees, bushes, or other permanent plantings within a drainage easement. Impede or obstruct the flow of stormwater runoff through a stream, channel, swale, pipe, sheet flow, etc.

Restriction on Owner/ Developer's Use of Utility Easements.

Owner/ Developer shall not erect buildings, structures, trees, fences, berms or ponds within the utility easement. Owner/ Developer shall grant no additional utility easements on, over, or within the easement without first securing the written authorization of the New Hanover County Engineering Department.

ALL ENCROACHMENTS & OBSTRUCTIONS MUST BE REMOVED

If have any questions or are aware of any encroachments or obstructions into easements or drainage ways, please contact the New Hanover County Engineering:

Jerry May Drainage Specialist (910) 798 – 7129 Tim Lowe, PE Chief Project Engineer (910) 798 - 7072





