



**Public Services**

Engineering  
212 Operations Center Drive  
Wilmington, NC 28412  
910 341-7807  
910 341-5881 fax  
wilmingtonnc.gov  
Dial 711 TTY/Voice

June 27, 2017

Mr. Thomas Walsh, V.P. Facilities & Support Services  
New Hanover Regional Medical Center  
2131 South 17<sup>th</sup> Street  
Wilmington, NC 28401

**Subject: Stormwater Management Permit No. 2017019R1  
NHRMC Employee Parking Deck (Hospital Plaza - Phase 2)  
High Density**

Dear Mr. Walsh:

The City of Wilmington Engineering Division has received a request for a revision to the Stormwater Management Permit for Hospital Plaza - Phase 2. Having reviewed the application and all supporting materials, the City of Wilmington has determined that the proposed revision meets the requirements of the City of Wilmington's Comprehensive Stormwater Ordinance.

The revisions include:

Addition of the NHRMC Employee Parking Deck Pedestrian Bridge, bus stop and dumpster location (See approved plans dated June 27, 2017).

Please be aware all terms and conditions of the permit SDP2007061 issued on 12/12/2007 remain in full force and effect. Any additional changes to the approved plans must be approved by this office prior to construction. The issuance of the plan revision does not preclude the permittee from complying with all other applicable statutes, rules, regulations or ordinances which may have jurisdiction over the proposed activity, and obtaining a permit or approval prior to construction.

The revised stamped, approved stormwater management drawings will be released for construction by the Wilmington Planning Division under separate cover. Please replace any old plan sheets from the approved set with the new, revised sheet. An electronic copy of the approved drawing set, permit, application and supplementary documents will be maintained by the Wilmington Engineering Division. If you have any questions, or need additional information, please contact Richard Christensen at (910) 341-7813 or richard.christensen@wilmingtonnc.gov

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sterling Cheatham'.

for Sterling Cheatham, City Manager  
City of Wilmington

cc: John S. Tunstall, PE, Norris & Tunstall Consulting Engineers, P.C.  
Brian Chambers, Senior Planner, City of Wilmington



N#T #16077-1  
(Cameron Side)



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**STORMWATER MANAGEMENT PERMIT APPLICATION FORM**  
(Form SWP 2.2)

**I. GENERAL INFORMATION**

1. Project Name (subdivision, facility, or establishment name - should be consistent with project name on plans, specifications, letters, operation and maintenance agreements, etc.):

Hospital Plaza - Phase 2

2. Location of Project (street address):

2120 South 17th Street

City: Wilmington County: New Hanover Zip: 28401

3. Directions to project (from nearest major intersection):

Project is directly across from the main entrance to NHRMC on 17th Street between Doctors Circle & Medical Center Drive.

**II. PERMIT INFORMATION**

1. Specify the type of project (check one):  Low Density  High Density  
 Drains to an Offsite Stormwater System  Drainage Plan  Other

If the project drains to an Offsite System, list the Stormwater Permit Number(s):

City of Wilmington: \_\_\_\_\_ State - NCDENR/DWQ: \_\_\_\_\_

2. Is the project currently covered (whole or in part) by an existing City or State (NCDENR/DWQ) Stormwater Permit?  Yes  No

If yes, list all applicable Stormwater Permit Numbers:

City of Wilmington: 2017019 State - NCDENR/DWQ: SW8 070547

3. Additional Project Permit Requirements (check all applicable):

CAMA Major  Sedimentation/Erosion Control

NPDES Industrial Stormwater  404/401 Permit: Proposed Impacts: \_\_\_\_\_

If any of these permits have already been acquired please provide the Project Name, Project/Permit Number, issue date and the type of each permit:

All required permits have been submitted & are under review.



**III. CONTACT INFORMATION**

1. Print Applicant / Signing Official's name and title (specifically the developer, property owner, lessee, designated government official, individual, etc. who owns the project):

Applicant / Organization: New Hanover Regional Medical Center

Signing Official & Title: Thomas Walsh, Vice President Facilities & Support Services

- a. Contact information for Applicant / Signing Official:

Street Address: 2131 S. 17th Street

City: Wilmington State: NC Zip: 28401

Phone: 910-343-2788 Fax: N/A Email: thomas.walsh@nhrmc.org

Mailing Address (if different than physical address): P.O. Box 9000

City: Wilmington State: NC Zip: 28402

- b. Please check the appropriate box. The applicant listed above is:

- The property owner (Skip to item 3)  
 Lessee\* (Attach a copy of the lease agreement and complete items 2 and 2a below)  
 Purchaser\* (Attach a copy of the pending sales agreement and complete items 2 and 2a below)  
 Developer\* (Complete items 2 and 2a below.)

2. Print Property Owner's name and title below, if you are the lessee, purchaser, or developer. (This is the person who owns the property that the project is on.)

Property Owner / Organization: Cameron Company, LLC

Signing Official & Title: William H. Cameron, Manager

- a. Contact information for Property Owner:

Street Address: 1201 Glen Meade Rd.

City: Wilmington State: NC Zip: 28401

Phone: 910-762-2676 Fax: 910-762-2680 Email: bill@cameronco.com

Mailing Address (if different than physical address): P.O. Box 3649

City: Wilmington State: NC Zip: 28406

3. (Optional) Print the name and title of another contact such as the project's construction supervisor or another person who can answer questions about the project:

Other Contact Person / Organization: \_\_\_\_\_

Signing Official & Title: \_\_\_\_\_

a. Contact information for person listed in item 3 above:

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Mailing Address (if different than physical address): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**IV. PROJECT INFORMATION**

1. In the space provided below, briefly summarize how the stormwater runoff will be treated.

Existing wet detention pond. Tracts A & B are approved at 70% impervious.

This modification adds the NHRMC Employee Parking Deck Pedestrian Bridge, bus stop and new dumpster.

2. Total Property Area: 124,960 square feet (Tract A + B)

3. Total Coastal Wetlands Area: 0 square feet

4. Total Surface Water Area: 0 square feet

5. Total Property Area (2) – Total Coastal Wetlands Area (3) – Total Surface Water Area (4) = Total Project Area: 124,960 square feet.

6. Existing Impervious Surface within Property Area: 79,346 square feet (Prior to Deck Approval)

7. Existing Impervious Surface to be Removed/Demolished: 62,080 square feet

8. Existing Impervious Surface to Remain: 17,266 square feet

9. Total Onsite (within property boundary) Newly Constructed Impervious Surface (in square feet):

Buildings/Lots	47,294
Impervious Pavement	14,736
Pervious Pavement (adj. total, with 0% credit applied)	0
Impervious Sidewalks	2,760
Pervious Sidewalks (adj. total, with 0% credit applied)	0
Other (describe) NHRMC Employee Parking Deck Pedestrian Bridge	337
Future Development	3,764
<b>Total Onsite Newly Constructed Impervious Surface</b>	<b>68,891</b>

10. Total Onsite Impervious Surface

(Existing Impervious Surface to remain + Onsite Newly Constructed Impervious Surface) = 86,157 square feet

11. Project percent of impervious area: (Total Onsite Impervious Surface / Total Project Area) x100 = 69 %

12. Total Offsite Newly Constructed Impervious Area (improvements made outside of property boundary, in square feet):

Impervious Pavement	0
Pervious Pavement (adj. total, with % credit applied)	0
Impervious Sidewalks	0
Pervious Sidewalks (adj. total, with % credit applied)	0
Other (describe) NHRMC Employee Parking Deck Pedestrian Bridge	1,323
<b>Total Offsite Newly Constructed Impervious Surface</b>	<b>1,323</b>

(In NC DOT ROW)

13. Total Newly Constructed Impervious Surface

(Total Onsite + Offsite Newly Constructed Impervious Surface) = 70214 square feet

14. Complete the following information for each Stormwater BMP drainage area. If there are more than three drainage areas in the project, attach an additional sheet with the information for each area provided in the same format as below. Low Density projects may omit this section and skip to Section V.

Basin Information	(Type of BMP) BMP # 1	(Type of BMP) BMP #	(Type of BMP) BMP #
Receiving Stream Name	Greenfield Lake		
Receiving Stream Index Number	18-76-1		
Stream Classification	C; Sw		
Total Drainage Area (sf)	283140	0	0
On-Site Drainage Area (sf)	283140		
Off-Site Drainage Area (sf)	0		
<b>Total Impervious Area (sf)</b>	<b>199458</b>	<b>17996</b>	<b>64397</b>
Buildings/Lots (sf)	14735		
Impervious Pavement (sf)	75614		
Pervious Pavement, % credit (sf)	0		
Impervious Sidewalks (sf)	9144		
Pervious Sidewalks, % credit (sf)	0		
Other (sf)	82393	(17996 Tract A &	64397 Tract B)
Future Development (sf)	3764		
Existing Impervious to remain (sf)	0		
Offsite (sf)	13808		
Percent Impervious Area (%)	70%		

15. How was the off-site impervious area listed above determined? Provide documentation:

New lane & sidewalks in 17th Street required for Phase I (from previous permit).

2017 - NHRMC Employee Parking Deck Pedestrian Bridge within Right-of Way.



## V. SUBMITTAL REQUIREMENTS

1. Supplemental and Operation & Maintenance Forms - One applicable City of Wilmington Stormwater BMP supplement form and checklist must be submitted for **each** BMP specified for this project. One applicable proposed operation and maintenance (O&M) form must be submitted for **each type** of stormwater BMP. Once approved, the operation and maintenance forms must be referenced on the final plat and recorded with the register of deeds office.
2. Deed Restrictions and Restrictive Covenants - For all subdivisions, outparcels, and future development, the appropriate property restrictions and protective covenants are required to be recorded prior to the sale of any lot. Due to variability in lot sizes or the proposed BUA allocations, a table listing each lot number, lot size, and the allowable built-upon area must be provided as an attachment to the completed and notarized deed restriction form. The appropriate deed restrictions and protective covenants forms can be downloaded at the link listed in section V (3). Download the latest versions for each submittal.

In instances where the applicant is different than the property owner, it is the responsibility of the property owner to sign the deed restrictions and protective covenants form while the applicant is responsible for ensuring that the deed restrictions are recorded.

**By the notarized signature(s) below, the permit holder(s) certify that the recorded property restrictions and protective covenants for this project, if required, shall include all the items required in the permit and listed on the forms available on the website, that the covenants will be binding on all parties and persons claiming under them, that they will run with the land, that the required covenants cannot be changed or deleted without concurrence from the City of Wilmington, and that they will be recorded prior to the sale of any lot.**

3. Only complete application packages will be accepted and reviewed by the City. A complete package includes all of the items listed on the City Engineering Plan Review Checklist, including the fee. Copies of the Engineering Plan Review Checklist, all Forms, Deed Restrictions as well as detailed instructions on how to complete this application form may be downloaded from:

<http://www.wilmingtonnc.gov/PublicServices/Engineering/PlanReview/StormwaterPermits.aspx>

The complete application package should be submitted to the following address:

City of Wilmington – Engineering  
Plan Review Section  
414 Chestnut Street, Suite 200  
Wilmington, NC 28402

**VI. CONSULTANT INFORMATION AND AUTHORIZATION**

1. Applicant: Complete this section if you wish to designate authority to another individual and/or firm (such as a consulting engineer and /or firm) so that they may provide information on your behalf for this project (such as addressing requests for additional information).

Consulting Engineer: T. Jason Clark, P.E.

Consulting Firm: Norris & Tunstall Consulting Engineers, P.C.

a. Contact information for consultant listed above:

Mailing Address: 902 Market Street

City: Wilmington State: NC Zip: 28401

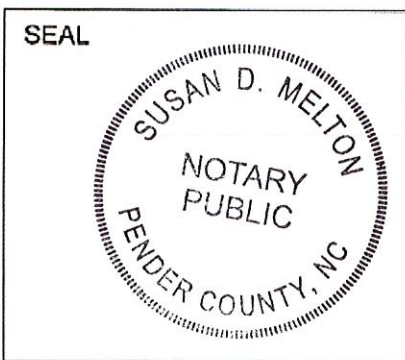
Phone: 910-343-9653 Fax: 910-343-9604 Email: jclark@ntengineers.com cc: anorris@ntengineers.com

**VII. PROPERTY OWNER AUTHORIZATION** (If Section III(2) has been filled out, complete this section)

I, (print or type name of person listed in Contact Information, item 2) William H. Cameron, Manager, certify that I own the property identified in this permit application, and thus give permission to (print or type name of person listed in Contact Information, item 1) Thomas Walsh with (print or type name of organization listed in Contact Information, item 1) New Hanover Regional Medical Center to develop the project as currently proposed. A copy of the lease agreement or pending property sales contract has been provided with the submittal, which indicates the party responsible for the operation and maintenance of the stormwater system.

As the legal property owner I acknowledge, understand, and agree by my signature below, that if my designated agent (entity listed in Contact Information, item 1) dissolves their company and/or cancels or defaults on their lease agreement, or pending sale, responsibility for compliance with the City of Wilmington Stormwater Permit reverts back to me, the property owner. As the property owner, it is my responsibility to notify the City of Wilmington immediately and submit a completed Name/Ownership Change Form within 30 days; otherwise I will be operating a stormwater treatment facility without a valid permit. I understand that the operation of a stormwater treatment facility without a valid permit is a violation of the City of Wilmington Municipal Code of Ordinances and may result in appropriate enforcement including the assessment of civil penalties.

Signature: [Handwritten Signature] Date: 4-7-17



I, Susan D. Melton, a Notary Public for the State of No. Carolina, County of Pender, do hereby certify that William H. Cameron personally appeared before me this 7 day of April, 2017, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal.  
[Handwritten Signature]  
My commission expires: 5-30-21



**VIII. APPLICANT'S CERTIFICATION**

I, *(print or type name of person listed in Contact Information, item 1)*, Thomas Walsh, VP Facilities & Support Services certify that the information included on this permit application form is, to the best of my knowledge, correct and that the project will be constructed in conformance with the approved plans, that the required deed restrictions and protective covenants will be recorded, and that the proposed project complies with the requirements of the applicable stormwater rules under.

Signature:  Date: 4-6-17

SEAL

MERI J. BATTLES  
NOTARY PUBLIC  
NEW HANOVER COUNTY, NC

I, Meri J Battles, a Notary Public for the State of North Carolina County of New Hanover do hereby certify that Thomas R. Walsh personally appeared before me this day of April 6, 2017, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal,  
Meri J Battles  
My commission expires: July 26, 2019



## Wet Detention Basin Operation and Maintenance Agreement

NJT # 16077

I will keep a maintenance record on this BMP. This maintenance record will be kept in a log in a known set location. Any deficient BMP elements noted in the inspection will be corrected, repaired or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public, and the removal efficiency of the BMP.

The wet detention basin system is defined as the wet detention basin, pretreatment including forebays and the vegetated filter if one is provided.

RECEIVED

**This system (check one):**

does  does not incorporate a vegetated filter at the outlet.

NOV 16 2016

**This system (check one):**

does  does not incorporate pretreatment other than a forebay.

ENGINEERING

Important maintenance procedures:

- Immediately after the wet detention basin is established, the plants on the vegetated shelf and perimeter of the basin should be watered twice weekly if needed, until the plants become established (commonly six weeks).
- No portion of the wet detention pond should be fertilized after the first initial fertilization that is required to establish the plants on the vegetated shelf.
- Stable groundcover should be maintained in the drainage area to reduce the sediment load to the wet detention basin.
- If the basin must be drained for an emergency or to perform maintenance, the flushing of sediment through the emergency drain should be minimized to the maximum extent practical.
- Once a year, a dam safety expert should inspect the embankment.

After the wet detention pond is established, it should be inspected **once a month and within 24 hours after every storm event greater than 1.5 inches**. Records of operation and maintenance should be kept in a known set location and must be available upon request.

Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

BMP element:	Potential problem:	How I will remediate the problem:
The entire BMP	Trash/debris is present.	Remove the trash/debris.
The perimeter of the wet detention basin	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.
	Vegetation is too short or too long.	Maintain vegetation at a height of approximately six inches.

Permit Number: \_\_\_\_\_  
 (to be provided by City of Wilmington)  
 BMP Drainage Basin #: \_\_\_\_\_

<b>BMP element:</b>	<b>Potential problem:</b>	<b>How I will remediate the problem:</b>
<b>The inlet device: pipe or swale</b>	The pipe is clogged.	Unclog the pipe. Dispose of the sediment off-site.
	The pipe is cracked or otherwise damaged.	Replace the pipe.
	Erosion is occurring in the swale.	Regrade the swale if necessary to smooth it over and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.
<b>The forebay</b>	Sediment has accumulated to a depth greater than the original design depth for sediment storage.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP.
	Erosion has occurred.	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticide is used, wipe it on the plants rather than spraying.
<b>The vegetated shelf</b>	Best professional practices show that pruning is needed to maintain optimal plant health.	Prune according to best professional practices
	Plants are dead, diseased or dying.	Determine the source of the problem: soils, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application to establish the ground cover if a soil test indicates it is necessary.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticide is used, wipe it on the plants rather than spraying.
<b>The main treatment area</b>	Sediment has accumulated to a depth greater than the original design sediment storage depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP.
	Algal growth covers over 50% of the area.	Consult a professional to remove and control the algal growth.
	Cattails, phragmites or other invasive plants cover 50% of the basin surface.	Remove the plants by wiping them with pesticide (do not spray).



Permit Number: \_\_\_\_\_  
 (to be provided by City of Wilmington)  
 BMP Drainage Basin #: \_\_\_\_\_

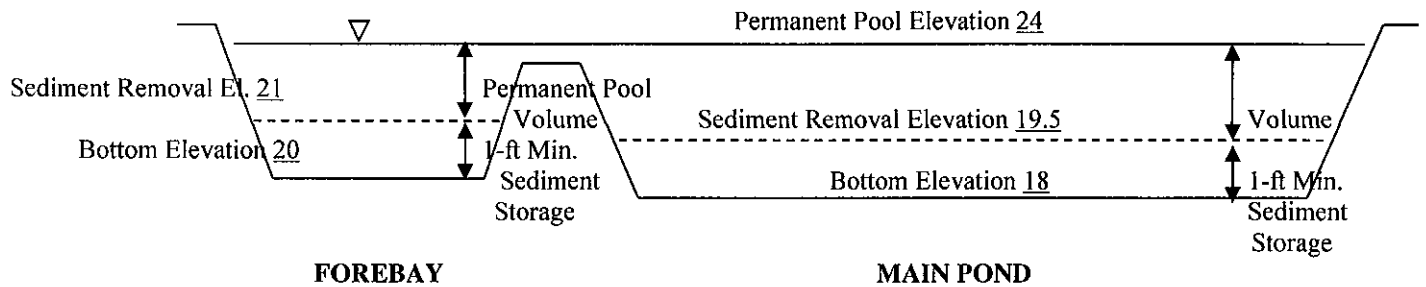
BMP element:	Potential problem:	How I will remediate the problem:
The embankment	Shrubs have started to grow on the embankment.	Remove shrubs immediately.
	Evidence of muskrat or beaver activity is present.	Use traps to remove muskrats and consult a professional to remove beavers.
	A tree has started to grow on the embankment.	Consult a dam safety specialist to remove the tree.
	An annual inspection by an appropriate professional shows that the embankment needs repair. (if applicable)	Make all needed repairs.
The outlet device	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged	Repair or replace the outlet device.
The receiving water	Erosion or other signs of damage have occurred at the outlet.	Contact the local NC Division of Water Quality Regional Office, or the 401 Oversight Unit at 919-733-1786.

The measuring device used to determine the sediment elevation shall be such that it will give an accurate depth reading and not readily penetrate into accumulated sediments.

When the permanent pool depth reads 4.5 feet in the main pond, the sediment shall be removed.

When the permanent pool depth reads 3.0 feet in the forebay, the sediment shall be removed.

**BASIN DIAGRAM**  
 (fill in the blanks)



Permit Number: \_\_\_\_\_  
(to be provided by City of Wilmington)

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above. I agree to notify the City of Wilmington of any problems with the system or prior to any changes to the system or responsible party.

Project name: Hospital Plaza-Phase 2  
BMP drainage basin number: 1

Print name: William H. Cameron, Manager of Cameron Company, LLC

Title: Manager of Cameron Company, LLC

Address: P.O. Box 3649 Wilmington, NC 28406

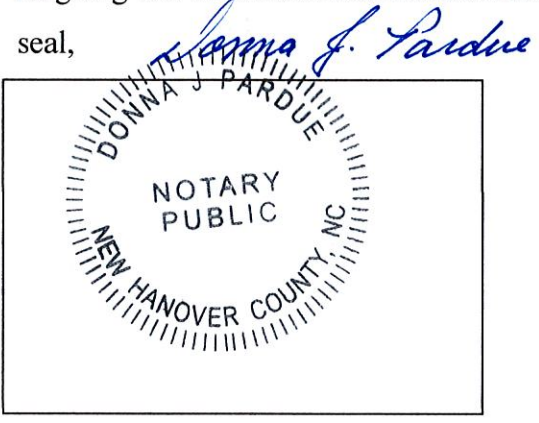
Phone: 910-762-2676

Signature: By: [Signature] Manager

Date: 10-25-16

Note: The legally responsible party should not be a homeowners association unless more than 50% of the lots have been sold and a resident of the subdivision has been named the president.

I, Donna J. Pardue, a Notary Public for the State of NC, County of New Hanover, do hereby certify that William H. Cameron personally appeared before me this 25<sup>th</sup> day of October, 2016, and acknowledge the due execution of the forgoing wet detention basin maintenance requirements. Witness my hand and official seal,



SEAL

My commission expires 11-11-21