

COMPREHENSIVE STORMWATER MANAGEMENT PERMIT

LOW DENSITY DEVELOPMENT WITH CURB-OUTLET SWALES

SECTION 1 – APPROVAL

Having reviewed the application and all supporting materials, the City of Wilmington has determined that the application is complete and the proposed development meets the requirements of the City of Wilmington's Comprehensive Stormwater Ordinance.

PERMIT HOLDER: **Mayfaire II, LLC**
PROJECT: **Mayfaire II Entrance**
ADDRESS: **1011 Eastwood Road**
PERMIT #: **2019020**
DATE: **April 8, 2019**

Therefore, the above referenced site is hereby approved and subject to all conditions set forth in Section 2 of this approval and all applicable provisions of the City of Wilmington Comprehensive Stormwater Management Ordinance.

This permit shall be effective from the date of issuance until April 8, 2029 and shall be subject to the following specified conditions and limitations:

Section 2 - CONDITIONS

1. This approval is valid only for the stormwater management system as proposed on the approved stormwater management plans dated 4/08/2019.
2. The project will be limited to the amount and type of built-upon area indicated in Section IV of the Stormwater Management Application Form submitted as part of the approved stormwater permit application package, and per the approved plans.
3. This project proposes a curb outlet system. Each designated curb outlet swale or 100' vegetated area shown on the approved plan must be maintained at a minimum of 100' long, maintain 5:1 (H:V) side slopes or flatter, have a longitudinal slope no steeper than 5%, carry the flow from a 10 year storm in a non-erosive manner, maintain a dense vegetated cover, and be located in either a dedicated common area or a recorded drainage easement. Runoff conveyances other than the curb outlet system swales, such as perimeter ditches, must be vegetated with side slopes no steeper than 3:1 (H:V).
4. No piping shall be allowed except those minimum amounts necessary to direct runoff as shown on approved plans.
5. This permit shall become void unless the facilities are constructed in accordance with the approved stormwater management plans, specifications and supporting documentation, including information provided in the application and supplements.
6. The runoff from all built-upon area within any permitted drainage area must be directed into the permitted stormwater control system for that drainage area.



7. The permittee shall submit a revised stormwater management application packet to the City of Wilmington and shall have received approval prior to construction, for any modification to the approved plans, including, but not limited to, those listed below:
 - Any revision to any item shown on the approved plans, including the stormwater management measures, built-upon area, details, etc.
 - Redesign or addition to the approved amount of built-upon area or to the drainage area.
 - Further subdivision, acquisition, lease or sale of any part of the project area.
 - Filling in, altering, or piping of any vegetative conveyance shown on the approved plan.
 - Construction of any permitted future areas shown on the approved plans.
8. A copy of the approved plans and specifications shall be maintained on file by the Permittee.
9. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.
10. If the stormwater system was used as an Erosion Control device, it must be restored to design condition prior to operation as a stormwater treatment device, and prior to issuance of any certificate of occupancy for the project.
11. All areas must be maintained in a permanently stabilized condition. If vegetated, permanent seeding requirements must follow the guidelines established in the North Carolina Erosion and Sediment Control Planning and Design Manual unless an alternative is specified and approved by the City of Wilmington.
12. All stormwater treatment systems as well as access to nearest right-of-way must be located in recorded easements.
13. The final plats for the project will be recorded showing all required drainage easements and common areas, in accordance with the approved plans.
14. The stormwater management system shall be constructed in its entirety, vegetated and operational for its intended use prior to the construction of any built-upon surface unless prior approval is obtained. City Staff must be notified of any deviation prior to construction of the built-upon surface. Any deviation request shall include justification and must propose an alternative timeline or construction sequence. Notification shall not constitute approval. Any alternative timeline approved by City staff shall become an enforceable component of this permit.



15. The permittee shall at all times provide the operation and maintenance necessary to assure the permitted stormwater system functions at optimum efficiency. The approved Operation and Maintenance Agreement must be followed in its entirety and maintenance must occur at the scheduled intervals including, but not limited to:
 - Scheduled quarterly inspections (interval as noted on the agreement).
 - Sediment removal.
 - Mowing and revegetation of slopes and the vegetated areas.
 - Maintenance of landscape plants, including those within the landscape buffer and on the vegetated shelf.
 - Immediate repair of eroded areas.
 - Maintenance of all slopes in accordance with approved plans and specifications.
 - Debris removal and unclogging of outlet structure, orifice device, flow spreader, catch basins and piping.
 - Access to the outlet structure must be available at all times.
16. Records of inspection, maintenance and repair for the permitted stormwater system must be kept by the permittee for at least 5 years from the date of record and made available upon request to authorized personnel of the City of Wilmington. The records will indicate the date, activity, name of person performing the work and what actions were taken.
17. Upon completion of construction, before a Certificate of Occupancy shall be granted, and prior to operation of this permitted facility, the applicant shall submit to the City of Wilmington as-built plans for all stormwater management facilities. The plans shall show the final design specifications and the field location, type, depth, invert and planted vegetation of all measures, controls and devices, as-installed. A certification shall be submitted, along with all supporting documentation that specifies, under seal that the as-built stormwater measures, controls and devices are in substantial compliance with the approved stormwater management plans. Any deviation from the approved plans must be noted on the Certification. A final inspection by City of Wilmington personnel will be required prior to issuance of a certificate of occupancy or operation of the permitted facility.
18. This permit is not transferable except after application and approval by the City of Wilmington. In the event of a change of ownership, name change or change of address the permittee must submit a completed Name/Ownership Change form to the City of Wilmington at least 30 days prior to the change. It shall be signed by all applicable parties, and be accompanied by all required supporting documentation. Submittal of a complete application shall not be construed as an approved application. The application will be reviewed on its own merits by the City of Wilmington and may or may not be approved. The project must be in compliance with the terms of this permit in order for the transfer request to be considered. The permittee is responsible for compliance with all permit conditions until such time as the City of Wilmington approves the transfer request. Neither the sale of the project nor the conveyance of common area to a third party should be considered as an approved transfer of the permit.
19. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to enforcement action by the City of Wilmington, in accordance with Sections 18-52 and 18-53 and any other applicable section of the Land Development Code.



Public Services

Engineering
414 Chestnut St, Suite 200
Wilmington, NC 28401
910 341-7807
910 341-5881 fax
wilmingtonnc.gov
Dial 711 TTY/Voice

20. The City of Wilmington may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the City of Wilmington for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the City of Wilmington that the changes have been made.
21. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state, and federal) having jurisdiction.
22. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by the City of Wilmington, such as the construction of additional or replacement stormwater management systems.
23. The permittee grants City of Wilmington Staff permission to enter the property during normal business hours for the purpose of inspecting all components of the permitted stormwater management facility.
24. The permit issued shall continue in force and effect until revoked or terminated by the City of Wilmington. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and re-issuance or termination does not stay any permit condition.
25. The approved stormwater management plans and all documentation submitted as part of the approved stormwater management permit application package for this project are incorporated by reference and are enforceable parts of the permit.
26. The permittee shall submit a renewal request with all required forms and documentation at least 180 days prior to the expiration date of this permit.
27. If any one or more of the conditions of this permit is found to be unenforceable or otherwise invalidated, all remaining conditions shall remain in full effect.

Stormwater Management Permit issued this the 8th day of April, 2019

A handwritten signature in blue ink, appearing to read 'S. Cheatham', is written over a horizontal line.

for Sterling Cheatham, City Manager
City of Wilmington



Public Services
Engineering
414 Chestnut St, Suite 200
Wilmington, NC 28401
910 341-7807
910 341-5881 fax
wilmingtonnc.gov
Dial 711 TTY/Voice



* Unless otherwise Noted

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.):

Mayfaire II Entrance

2. Location of Project (street address):

1011 Eastwood Road

City: Wilmington County: New Hanover Zip: 28403

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

Heading southwest on US Hwy. 17 (Market Street), turn left (east) onto Eastwood Road and drive 1.4 miles before turning left onto Barrington Road (proposed entrance).

II. PERMIT INFORMATION

1. Specify the type of project (check one): [X] 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 [X] No

If yes, list all applicable Stormwater Permit Numbers:

City of Wilmington: State - NCDENR/DWQ:

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:

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: Mayfaire II, LLC

Signing Official & Title: H.J. Brody, Manager for Mayfaire II, LLC

- a. Contact information for Applicant / Signing Official:

Street Address: 530 SE Greenville Boulevard, Suite 200

City: Greenville State: NC Zip: 27858

Phone: 252-353-2141 Fax: 252-353-2143 Email: danrahe@brodyco.com

Mailing Address (if different than physical address): _____

City: _____ State: _____ Zip: _____

- 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: _____

Signing Official & Title: _____

- a. Contact information for Property Owner:

Street Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Mailing Address (if different than physical address): _____

City: _____ State: _____ Zip: _____

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: Dan Rahe, Brody Co. Inc.

Signing Official & Title: Director of Construction, Brody Co. Inc.

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

Street Address: _____

City: _____ State: _____ Zip: _____

Phone: 910-279-9286 Fax: _____ Email: danrahe@brodyco.com

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.

Stormwater runoff from the development will be captured in a proposed stormwater sewer system and discharged to existing and proposed swales.

2. Total Property Area: 1,720,180 square feet

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: 1,720,180 square feet.

6. Existing Impervious Surface within Property Area: 0 square feet

7. Existing Impervious Surface to be Removed/Demolished: 0 square feet

8. Existing Impervious Surface to Remain: 0 square feet

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

Buildings/Lots	0
Impervious Pavement	21,796
Pervious Pavement (adj. total, with 0% credit applied)	0
Impervious Sidewalks	1,871
Pervious Sidewalks (adj. total, with 0% credit applied)	0
Other (describe) Asphalt Multi-Use Path	3,623
Future Development	0
Total Onsite Newly Constructed Impervious Surface	27,290

10. Total Onsite Impervious Surface

(Existing Impervious Surface to remain + Onsite Newly Constructed Impervious Surface) = 27,290 square feet

11. Project percent of impervious area: (Total Onsite Impervious Surface / Total Project Area) x100 = 2 %

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

Impervious Pavement	112
Pervious Pavement (adj. total, with % credit applied)	0
Impervious Sidewalks	0
Pervious Sidewalks (adj. total, with % credit applied)	0
Other (describe)	0
Total Offsite Newly Constructed Impervious Surface	112

13. Total Newly Constructed Impervious Surface

(Total Onsite + Offsite Newly Constructed Impervious Surface) = 27402 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	Proposed Swale BMP # 1	BMP #	BMP #
Receiving Stream Name	Bradley Creek		
Receiving Stream Index Number	18-87-24-4-(1)		
Stream Classification	SC; HQW; #		
Total Drainage Area (sf)	1720292	0	0
On-Site Drainage Area (sf)	1720292		
Off-Site Drainage Area (sf)	0		
Total Impervious Area (sf)	27333	0	0
Buildings/Lots (sf)	0		
Impervious Pavement (sf)	21796		
Pervious Pavement, % credit (sf)	0		
Impervious Sidewalks (sf)	5537		
Pervious Sidewalks, % credit (sf)	0		
Other (sf)			
Future Development (sf)	0		
Existing Impervious to remain (sf)	0		
Offsite (sf)	0		
Percent Impervious Area (%)	1.6		

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

Please see included design plans, narrative, and calculations.

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: Rob Balland, PE

Consulting Firm: Paramounte Engineering, Inc.

a. Contact information for consultant listed above:

Mailing Address: 122 Cinema Drive

City: Wilmington State: NC Zip: 28403

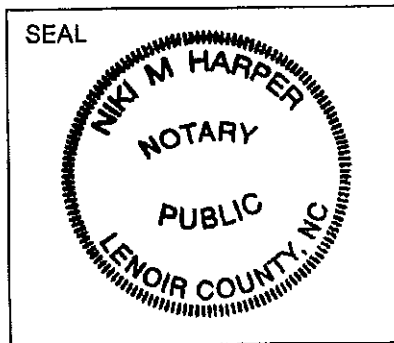
Phone: 910-791-6707 Fax: 910-791-6760 Email: rballand@paramounte-eng.com

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*) _____, 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*) _____ with (*print or type name of organization listed in Contact Information, item 1*) _____ 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: Hq Bredy for Magnix II, LLC Date: 12/27/18

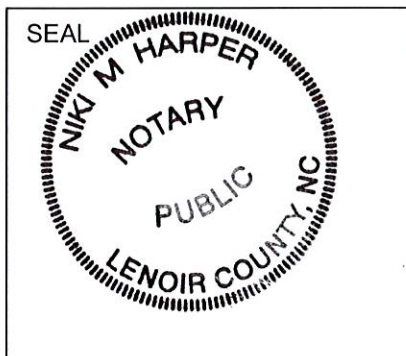


I, Niki M. Harper, a Notary Public for the State of North Carolina, County of Lenoir, do hereby certify that H J Bredy personally appeared before me this day of December, 2018, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal,
Niki M. Harper
My commission expires: Jan. 20, 2019

VIII. APPLICANT'S CERTIFICATION

I, (print or type name of person listed in Contact Information, item 1), H.J. Brady 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: HJ Brady for MyPave II, LLC Date: 12/27/18



I, Niki M. Harper, a Notary Public for the State of North Carolina, County of Lenoir, do hereby certify that HJ Brady personally appeared before me this day of December, 2018, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal,
Niki M Harper
My commission expires: Jan. 20, 2019

STORMWATER MANAGEMENT PERMIT APPLICATION FORM
 401 CERTIFICATION APPLICATION FORM
GRASSED SWALE SUPPLEMENT

This form must be filled out, printed and submitted.

The Required Items Checklist (Part III) must also be filled out, printed and submitted along with all of the required information.

I. PROJECT INFORMATION

Project name	Mayfaire II Entrance Road
Contact name	H. J. Brody
Phone number	252-353-2141
Date	March 9, 2019
Drainage area number	1

II. DESIGN INFORMATION

Site Characteristics

Drainage area	35,132.00 ft ²
Impervious area	27,333.00 ft ²
Percent impervious	77.8% %
Design rainfall depth	1.50 inch

Peak Flow Calculations

10-yr storm runoff depth		in
10-yr storm intensity	7.23	in/hr
Post-development 10-yr storm peak flow	1.11	ft ³ /sec

Velocity

Maximum non-erosive velocity (peak 10-year storm)	2.50	ft/sec
Soil characteristics (enter "x" below)		
Sand/silt (easily erodible)	x	
Clay mix (erosion resistant)		
Grass Type (enter "x" below)		
Bermuda		
Tall fescue	x	
Bahiagrass		
Kentucky bluegrass		
Grass-legume mixture		

Swale type: Fill out *one* of the options below:

<u>Option 1: Curb Outlet Swale:</u>	N	(Y or N)	
Maximum velocity			
Side slopes		:1	
Swale length		ft	
<u>Option 2: Swale Seeking Pollutant Credit ("For-Credit" Swale):</u>	Y	(Y or N)	
Maximum velocity for 10-yr storm	0.83	ft/sec	OK
Side slopes	5.00	:1	OK
Swale length	105.00	ft	Insufficient swale length.

Swale Characteristics

Swale Shape: Enter an "x" in the appropriate cell below:

Trapezoidal	<u> x </u>
Parabolic	<u> </u>
V-shaped	<u> </u>
Width of the bottom of the swale	<u> 3.00 </u> ft
Width of the top of the swale	<u> 10.00 </u> ft

Additional Information

Is the swale sized for all runoff from ultimate build-out?	<u> </u> Y (Y or N)	OK
Is the BMP located in a proposed drainage easement with a recorded access easement to a public Right of Way (ROW)?	<u> </u> Y (Y or N)	OK
What is the distance from the bottom of the swale to the SHWT?	<u> 2.00 </u> ft	OK
What is the ground level elevation?	<u> 27.00 </u> fmsl	
What is the elevation of the bottom of the swale?	<u> 24.00 </u> fmsl	
What is the SHWT elevation?	<u> 22.00 </u> fmsl	
What is the longitudinal slope of the swale?	<u> 0.35 </u> %	OK
What is the depth of freeboard?	<u> 0.75 </u> ft	OK

Grassed Swale Operation and Maintenance Agreement

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.

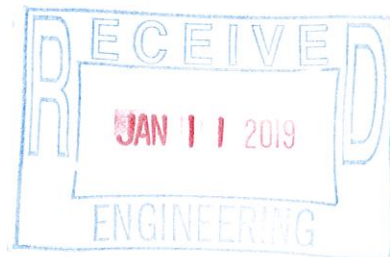
Important maintenance procedures:

- The drainage area of the grassed swale will be carefully managed to reduce the sediment load to the grassed swale.
- After the first-time fertilization to establish the grass in the swale, fertilizer will not be applied to the grassed swale.

The grassed swale will be inspected **once a quarter**. Records of operation and maintenance will be kept in a known set location and will 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 length of the swale	Trash/debris is present.	Remove the trash/debris.
	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, and then re-sod (or plant with other appropriate species) and water until established. Provide lime and a one-time fertilizer application.
	Sediment covers the grass at the bottom of the swale.	Remove sediment and dispose in an area that will not impact streams or BMPs. Re-sod if necessary.
	Vegetation is too short or too long.	Maintain vegetation at a height of approximately six inches.
The receiving water	Erosion or other signs of damage have occurred at the outlet.	Contact the NC Division of Water Quality 401 Oversight Unit at 919-733-1786.



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: St. Mark Catholic Church / Mayfaire II Entrance

BMP drainage basin number: Grassed Swale #3

Print name: H. J. Brody for Mayfaire II, LLC

Title: Manager

Address: 1/2 Brody Ln 5301E Greenville Boulevard Suite 200 Greenville, NC. 27838

Phone: 252-353-2141

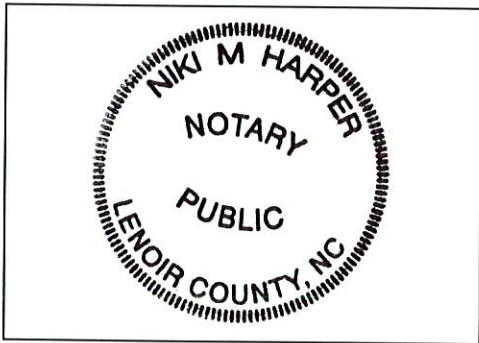
Signature: [Handwritten Signature]

Date: 12/27/18

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, Niki M. Harper, a Notary Public for the State of North Carolina, County of Lenoir, do hereby certify that H J Brody personally appeared before me this 27 day of December, 2018, and acknowledge the due execution of the forgoing grassed swale maintenance requirements. Witness my hand and official seal,

Niki M. Harper



SEAL

My commission expires Jan. 20, 2019