



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

COMPREHENSIVE STORMWATER MANAGEMENT PERMIT

HIGH DENSITY DEVELOPMENT

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: H & S Family Holdings, LLC

PROJECT:

6721 Market - Enterprise Rent-A-Car

ADDRESS:

6721 Market Street

PERMIT #: DATE:

2020030 09/25/2020

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 9/25/2030 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 9/25/2020.
- 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 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.
- 4. 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.
- 5. 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:
 - a. Any revision to any item shown on the approved plans, including the stormwater management measures, built-upon area, details, etc.
 - b. Redesign or addition to the approved amount of built-upon area or to the drainage area.
 - c. Further subdivision, acquisition, lease or sale of any part of the project area.
 - d. Filling in, altering, or piping of any vegetative conveyance shown on the
 - e. Construction of any permitted future areas shown on the approved plans.





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- 6. A copy of the approved plans and specifications shall be maintained on file by the Permittee.
- 7. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.
- 8. 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.
- 9. 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.
- 10. All applicable operation & maintenance agreements and easements pertaining to each stormwater treatment system shall be referenced on the final plat and recorded with the Register of Deeds upon final plat approval. If no plat is recorded for the site the operation and maintenance agreements and easements shall be recorded with the Register of Deeds so as to appear in the chain of title of all subsequent purchasers under generally accepted searching standards.
- 11. 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.
- 12. 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:

a. Scheduled inspections (interval noted on the agreement).

Sediment removal.

c. Mowing and revegetation of slopes and the vegetated areas.

d. Maintenance of landscape plants, including those within the landscape buffer and on the vegetated shelf.

e. Immediate repair of eroded areas, especially slopes.

f. Debris removal and unclogging of outlet structure, orifice device, flow spreader, catch basins and/or piping.

g. Access to the outlet structure must be available at all times.

13. 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.





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- 14. Upon completion of construction, before a Certificate of Occupancy shall be granted, and prior to operation or intended use 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 compliance with the approved stormwater management plans. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.





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- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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 20th day of October, 2020

for Sterling Cheatham, City Manager

- f os

City of Wilmington



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



STORMWATER MANAGEMENT PERMIT APPLICATION FORM (Form SWP 2.2)

l.	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.): 6721 Market - Enterprise Rent - A - Coc
2.	Location of Project (street address): 6717, 6719, 6721 & 6725 Market Street
	City: Wilmington County: New Hanover Zip: 28412
3.	Directions to project (from nearest major intersection): Site is +/- 450 If south of the intersection of Independence Blvd and Carolina Beach Rd
MARKET .	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: 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: H & S Family Holdings, LLC
	Signing Official & Title: H. Carlton Fisher - Managing Member
	a. Contact information for Applicant / Signing Official: Street Address:
	City: Wilmington State: NC Zip: 28401
	Phone: 910-763-5411 Fax:Email:cfisher@coastal-realty.com
	Mailing Address (if different than physical address):
	City:State:Zip:
	b. Please check the appropriate box. The applicant listed above is:
2.	X 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.) 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:
	Signing Official & Title:



	 a. Contact information for person listed in ite 	ii 3 above.	
	Street Address:		
	City:		
	Phone:Fax:		
	Mailing Address (if different than physical add		
	City:		
V.	PROJECT INFORMATION		
1.	In the space provided below, briefly summarize h Stormwater will be treated by a wet detenti		treated.
2.	Total Property Area: 112,211 square feet		
3.	Total Coastal Wetlands Area:squa	e feet	
	Total Surface Water Area:0square		
	Total Property Area (2) – Total Coastal Wetlands	Area (3) – Total Surface Water	Area (4) = Tota
ο.	Project Area: 112,211 square feet.		
	Project Area: <u>112,211</u> square feet. Existing Impervious Surface within Property Area	32,798 square feet	
8.	Existing Impervious Surface within Property Area		
S. 7.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den	olished: 32,798 square fee	
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den	olished: <u>32,798</u> square fee square feet	t
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain: 0 Total Onsite (within property boundary) Newly Co	olished: <u>32,798</u> square fee square feet nstructed Impervious Surface (<i>i</i>	t
S. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Co	olished: 32,798 square fee square feet nstructed Impervious Surface (in	t
S. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Consultation Surface Sulldings/Lots Impervious Pavement	olished: 32,798 square fee square feet structed Impervious Surface (in 12,417 sf 61,733 sf	t
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Consultation Buildings/Lots Impervious Pavement Pervious Pavement (adj. total, with % credit as	olished: 32,798 square fee square feet square feet structed Impervious Surface (in 12,417 sf 61,733 sf plied)	t
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Control Suildings/Lots Impervious Pavement Pervious Pavement (adj. total, with % credit as Impervious Sidewalks	32,798 square fee 	t
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Consultation Surface to Remain:0 Buildings/Lots Impervious Pavement Pervious Pavement (adj. total, with % credit as Impervious Sidewalks	32,798 square fee 	t
5. 7. 3.	Existing Impervious Surface within Property Area Existing Impervious Surface to be Removed/Den Existing Impervious Surface to Remain:0 Total Onsite (within property boundary) Newly Control Suildings/Lots Impervious Pavement Pervious Pavement (adj. total, with % credit as Impervious Sidewalks) Pervious Sidewalks (adj. total, with % credit as Impervious Sidewalks)	square feet square feet square feet square feet structed Impervious Surface (ii) structed Impervious Surface (ii) structed structed Impervious Surface (ii) structed structed Impervious Surface (ii) structed structed Impervious Surface (ii) structed Impervious Surface (iii) structed Impervious Surface (iii)	t



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

Impervious Pavement		1,215 sf
Pervious Pavement (adj. total, with	% credit applied)	
Impervious Sidewalks		
Pervious Sidewalks (adj. total, with	% credit applied)	1,200,000
Other (describe)		
Total Offsite Newly Constructed Imp	pervious Surface	1,215 sf

13.	Total Newly Constructed Impervious Surface		
((Total Onsite + Offsite Newly Constructed Impervious Surface) =	77,905 sf	_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	BMP#	BMP#	BMP#
Receiving Stream Name	Howe Creek		
Receiving Stream Index Number	18-87-23		
Stream Classification	SA, ORW		
Total Drainage Area (sf)	95,117		
On-Site Drainage Area (sf)	95,117		
Off-Site Drainage Area (sf)			
Total Impervious Area (sf)	76,690		
Buildings/Lots (sf)	12,417		
Impervious Pavement (sf)	61,733		
Pervious Pavement (sf)			
Impervious Sidewalks (sf)	2,500		
Pervious Sidewalks (sf)			
Other (sf)	40		
Future Development (sf)			
Existing Impervious to remain (sf)			
Offsite (sf)			
Percent Impervious Area (%)	80.63		

15. How was the off-s	ite impervious area	i listed above determined	1? Provide documentation:



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 – Englneering Plan Review Section 212 Operations Center Dr Wilmington, NC 28412



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: Mark N. Hargrove, PE
	Consulting Firm: Port City Consulting Engineers, PLLC
	a. Contact information for consultant listed above:
	Mailing Address: 6216 Stonebridge Road
	City: Wilmington State: NC Zip: 28409
	Phone: 910-599-1744Fax: Email: mhargrove@ec.rr.com
VII	. PROPERTY OWNER AUTHORIZATION (If Section III(2) has been filled out, complete this section)
As de Wires Ch	in the property identified in this permit application, and thus give permission to (print or type name of son listed in Contact Information, item 1)
	I,, a Notary Public for the
	State of, County of, do
	hereby certify that
	personally appeared before me this day of,



and acknowledge the due execution	of the application for a stormwater permit. Witness my hand and o	official seal,
My commission expires:		
VIII. APPLICANT'S CERTIFIC	CATION	
that the project will be constructed	Contect Information, item 1). H. Carlton Fisher this permit application form is, to the best of my knowledge, ced in conformance with the approved plans, that the required ants will be recorded, and that the proposed project complies requirements of the applicable stormwater rules under.	deed
SEAL	Signature: A culture storm trainer rules under.	
ANDREA C HOPE NOTARY PUBLIC PENDER COUNTY, NC My Commission Expires 7-28-2024	Date: 1-7-2020 I. Andrea C. Hope, a Notary Public State of Alarth Carolina, County of Pender hereby certify that H. Carlton Fisher	
permit. Witness my hand and official	personally appeared before me this day of	
My commission expires:	3a\24	

SUPPLEMENT-EZ COVER PAGE

FORMS LOADED

1	Project Name	6721 Market
2	Project Area (ac)	2.18
3	Coastal Wetland Area (ac)	Ö
4	Surface Water Area (ac)	0
5	Is this project High or Low Density?	High
6	Does this project use an off-site SCM?	No

OM	PLIANCE WITH 02H .1003(4)	MARTINE STREET, AND
7	Width of vegetated setbacks provided (feet)	50
8	Will the vegetated setback remain vegetated?	Yes
9	Is BUA other that as listed in .1003(4)(c-d) out of the setback?	Yes
10	Is streambank stabilization proposed on this project?	No

11	Infiltration System	0
12	Bioretention Cell	0
13	Wet Pond	1
14	Stormwater Wetland	Ó
15	Permeable Pavement	0
16	Sand Filter	Ö
17	Rainwater Harvesting (RWH)	0
18	Green Roof	0
19	Level Spreader-Filter Strip (LS-FS)	Ö
20	Disconnected Impervious Surface (DIS)	0
21	Treatment Swale	0
22	Dry Pond	0
23	StormFilter	0
24	Silva Cell	0
25	Bayfilter	0
26	Filterra	0

FORMS LOADED

SEAL 019742

SEAL ONE NOTIFE ROLL OF SEAL OF S

ESI	GNER CERTIFICATION	
27	Name and Title:	Mark N. Hargrove, PE
28	Organization:	Port City Consulting Engineers, PLLC
29	Street address:	6216 Stonebridge Road
30	City, State, Zip:	Wilmington, NC 28409
31	Phone number(s):	910-599-1744
32	Email:	mhargrove@ec.rr.com

Certification Statement:

Leartify, under penalty of law that this Supplement-EZ form and all supporting information were prepared under my direction or supervision; that the information provided in the form is, to the best of my knowledge and belief, true, accurate, and complete; and that the engineering plans, specifications, operation and maintenance agreements and other supporting information are consistent with the information provided here.

<u>Designer</u>

Mark N. Hargrore
Signature of Designer

7/07/2020
Date

DRAINAGE AREAS

1	Is this a high density project?	Yes
2	If so, number of drainage areas/SCMs	1
3	Is all/part of this project subject to previous rule versions?	No

FORMACIOARER	
FORMS LOADED	

RA	INAGE AREA INFORMATION	Entire Site	1
4	Type of SCM	Wet Pond	
5	Total BUA in project (sq ft)	76690 sf	
	New BUA on subdivided lots (subject to		
6	permitting) (sq ft)		
	New BUA outside of subdivided lots (subject to		
7	permitting) (sf)		
8	Offsite - total area (sq ft)		
9	Offsite BUA (sq ft)		
10	Breakdown of new BUA outside subdivided lots:		
	- Parking (sq ft)	61733 sf	
	- Sidewalk (sq ft)	2500 sf	
	- Roof (sq ft)	12417 sf	
	- Roadway (sq ft)		
	- Future (sq ft)		
	- Other, please specify in the comment box		
	below (sq ft)	40 sf	
	New infiltrating permeable pavement on		
11	subdivided lots (sq ft)		
	New infiltrating permeable pavement outside of		
12	subdivided lots (sq ft)		
	Exisitng BUA that will remain (not subject to		
13	permitting) (sq ft)		
14	Existing BUA that is already permitted (sq ft)		
15	Existing BUA that will be removed (sq ft)		
16	Percent BUA	80.63%	
17	Design storm (inches)	1.5 in	
18	Design volume of SCM (cu ft)	9492 cf	
19	Calculation method for design volume	Schueler	

ADDITIONAL INFORMATION

Please use this space to provide any additional information about the drainage area(s):

Other impervious area is 40 sf for a concrete generator pad

DRAI	NAGE AREA INFORMATION	Entire Site	1
4	Type of SCM	Wet Pond	
5	Total BUA from project (sq ft)		
6	1995 rules		
	SL 2006-246		
	2008 rules		
	2017 rules	76690 sf	
	New BUA on subdivided lots (subject to		
7	permitting) (sq ft)		
	1995 rules		
	SL 2006-246		
	2008 rules		
	2017 rules		
	New BUA outside of subdivided lots (subject		
8	to permitting) (sf)		
	1995 rules		
	SL 2006-246		
	2008 rules		
	2017 rules		
9	Offsite - total area (sq ft)		
	1995 rules		
	SL 2006-246		
	2008 rules		
	2017 rules		
10	Offsite BUA (sq ft)		
10	1995 rules		
	SL 2006-246		
	2008 rules		
	2017 rules		
11	Design storm (inches)		
11			
	1995 rules		
	SL 2006-246		1
	2008 rules	4.5.	
40	2017 rules	1,5 in	
12	Breakdown of new BUA:		
	- Parking (sq ft)	61733 sf	
	- Sidewalk (sq ft)	2500 sf	
	- Roof (sq ft)	12417 sf	
	- Roadway (sq ft)		\$0.50 TEMPONE
	- Future (sq ft)		
	- Other, please specify in the comment box		
	below (sq ft)	40 sf	
	New infiltrating permeable pavement on		
13	subdivided lots (sq ft)		
	New infiltrating permeable pavement outside of		
14	subdivided lots (sq ft)		
	Exisiting BUA that will remain (not subject to		
15	permitting) (sq ft)	0	
16	Existing BUA that is already permitted (sq ft)	0	
17	Existing BUA that will be removed (sq ft)	32798 sf	22.85
18	Percent BUA	80.63%	
19	Design volume of SCM (cu ft)	9492 cf	
20	Calculation method for design volume	Schueler	

ADDITIONAL INFORMATION

Please use this space to provide any additional information about the drainage area(s):
The 40 sf is for a concrete generator pad

WET POND

6 7 8 9 10 11 12 13	Design volume of SCM (cu ft) LMDC FROM 02H .1050 Is the SCM sized to treat the SW from all surfaces at build-out? Is the SCM located away from contaminated soils? What are the side slopes of the SCM (H:V)? Does the SCM have retaining walls, gabion walls or other engineered side slopes? Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction? Does the maintenance access comply with General MDC (8)?	Yes Yes 3:1 Yes Yes Yes
3 4 5 6 7 8 9 10 11 12 13	Is the SCM sized to treat the SW from all surfaces at build-out? Is the SCM located away from contaminated soils? What are the side slopes of the SCM (H:V)? Does the SCM have retaining walls, gabion walls or other engineered side slopes? Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	Yes 3:1 Yes Yes
5 6 7 8 9 10 11 12 13	What are the side slopes of the SCM (H:V)? Does the SCM have retaining walls, gabion walls or other engineered side slopes? Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	3:1 Yes Yes
6 7 8 9 10 11 12 13	Does the SCM have retaining walls, gabion walls or other engineered side slopes? Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	Yes Yes
6 7 8 9 10 11 12 13	engineered side slopes? Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	Yes
7 8 9 10 11 12 13	Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	Yes
7 8 9 10 11 12 13	(10-year storm)? Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	
8 9 10 11 12 13	Is there an overflow or bypass for inflow volume in excess of the design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	
8 9 10 11 12 13	design volume? What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	Yes
9 10 11 12 13	What is the method for dewatering the SCM for maintenance? If applicable, will the SCM be cleaned out after construction?	163
10 11 12 13	If applicable, will the SCM be cleaned out after construction?	Pump (preferre
11 12 13		Yes
12 13		Yes
13 14	Does the drainage easement comply with General MDC (9)?	Yes
14	If the SCM is on a single family lot, does (will?) the plat comply with	
	General MDC (10)?	No
15	Is there an O&M Agreement that complies with General MDC (11)?	Yes
	Is there an O&M Plan that complies with General MDC (12)?	Yes
	Does the SCM follow the device specific MDC?	Yes
THE REAL PROPERTY.	Was the SCM designed by an NC licensed professional?	Yes
	OND MDC FROM 02H .1053	CAIDA
	Method used	SA/DA Yes
	Has a stage/storage table been provided in the calculations? Elevation of the excavated main pool depth (bottom of sediment	res
	removal) (fmsl)	34.00
-20	Terrioval) (IIIIsi)	04.00
21	Elevation of the main pool bottom-(top of sediment removal) (fmsl)	35.00
	Elevation of the bottom of the vegetated shelf (fmsl)	39,50
	Elevation of the permanent pool (fmsl)	40.50
	Elevation of the top of the vegetated shelf (fmsl)	40.50
25	Elevation of the temporary pool (fmsl)	41.75
26	Surface area of the main permanent pool (square feet)	5485
	Volume of the main permanent pool (cubic feet)	14637 cf
	Average depth of the main pool (feet)	3.50 ft
-	Average depth equation used	Equation 3
30	If using equation 3, main pool perimeter (feet)	309.0 ft
31	If using equation 3, width of submerged veg. shelf (feet)	6.0 ft
	Volume of the forebay (cubic feet)	2884 cf
	Is this 15-20% of the volume in the main pool?	Yes 48 in
	Clean-out depth for forebay (inches) Design volume of SCM (cu ft)	9492 cf
	Is the outlet an orifice or a weir?	Orifice
37	If orifice, orifice diameter (inches)	1.75 in
38	If weir, weir height (inches)	1.70
39	If weir, weir length (inches)	
	Drawdown time for the temporary pool (days)	2.1
	Are the inlet(s) and outlet located in a manner that avoids short-	
	circuiting?	Yes
1	Are berms or baffles provided to improve the flow path?	Yes
43	Depth of forebay at entrance (inches)	48 in
44	Depth of forebay at exit (inches)	18 in
45	Does water flow out of the forebay in a non-erosive manner?	Yes
	Width of the vegetated shelf (feet)	6 ft
	Slope of vegetated shelf (H:V)	6:1
2000	Does the orifice drawdown from below the top surface of the	
	permanent pool?	Yes
	Does the pond minimize impacts to the receiving channel from the 1-	
	yr, 24-hr storm?	Yes
	Are fountains proposed? (If Y, please provide documentation that MDC(9) is met.)	Yes
- 30	INDO(9) IS Met.)	103
51	Is a trash rack or other device provided to protect the outlet system?	Yes
	is a trastitiación other device provided to protect the oddet system:	100
52	Are the dam and embankment planted in non-clumping turf grass?	Yes
	Species of turf that will be used on the dam and embankment	centipede
	Has a planting plan been provided for the vegetated shelf?	Yes
SACROPHIC STATE	ONAL INFORMATION	
MINISTERNA MARKANIA	Please use this space to provide any additional information about	
	the wet pond(s):	

Permit Number:	20%	200	30
(to be prov	ided by (City of Wi	lmington)
SCM Drainage Ba	sin#:	1	

Wet Detention Basin Operation and Maintenance Agreement

I will keep a maintenance record on this SCM. This maintenance record will be kept in a log in a known set location. Any deficient SCM 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 pollutant removal efficiency of the SCM.

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

This system (check one):	
☐ does ✓ does not	incorporate a vegetated filter at the outlet

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.

SCM element:	Potential problem:	How to remediate the problem:	
The entire SCM	Trash/debris is present.	Remove the trash/debris.	
The perimeter of the SCM	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary, to	
	Vegetation is too short or too long.	Maintain vegetation at a height of approximately six inches.	

SCM element:	Potential problem:	How to remediate the problem:
The inlet device:	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.
	Stone verge is clogged or covered in sediment (if applicable).	Remove sediment and replace with clean stone.
The forebay	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 SCM.
	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.
The vegetated shelf	Best professional practices show that pruning is needed to maintain optimal plant health.	Prune according to best professional practices
2	Weeds are present.	Remove the weeds, preferably by hand. If pesticide is used, wipe it on the plants rather than spraying.
	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
The main treatment area	Sediment has accumulated to a depth greater than the original design sediment storage depth.	it is necessary. 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 SCM.

Permit Number: 2020030
(to be provided by City of Wilmington)
SCM Drainage Basin #: ______

SCM element:	Potential problem:	How I will remediate the problem:
The main treatment area (continued)	Algal growth covers over 25% 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).
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 Department of Environment and Natural Resources regional Office.

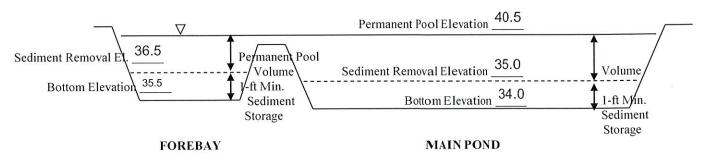
The measuring device used to determine the sediment elevation shall be such that it will give an accurate depth reading and not readily penetrate into accumulated sediments.

When the permanent pool depth reads $_5.5$ feet in the main pond, the sediment shall be removed.

When the permanent pool depth reads <u>4.0</u> feet in the forebay, the sediment shall be removed.

BASIN DIAGRAM

(fill in the blanks)



Permit Number: 2020036 (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: 6721 Market
SCM drainage basin number: 1
Print name: H. Carlton Fisher
Title:_Managing Member of H & S Family Holdings, LLC
Address:_1608 Market Street, Wilmington, NC 28401
Phone: 910-763-5411
Signature: H. Casten John
Date: 7-7-2020
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, Andrea C. Hope, a Notary Public for the State of
Horth Carolina, County of Fence, do hereby certify that
H. Carlton Fisher personally appeared before me this The
day of,, and acknowledge the due execution of the
forgoing wet detention basin maintenance requirements. Witness my hand and official
seal,
ANDREA C HOPE NOTARY PUBLIC PENDER COUNTY, NC My Commission Expires 7-26-2024
SEAL
My commission expires $\frac{4}{2}$