

STORMWATER CONTROL STRUCTURE WAKE COUNTY, NC 72
BIORETENTION MAINTENANCE AGREEMENT

TAMMY L. BRUNNER
REGISTER OF DEEDS
PRESENTED & RECORDED ON
11/22/2022 16:07:10

PROJECT: REDFORD PLACE MEDICAL OFFICE

RESPONSIBLE PARTY: REDFORD 101 LLC

PHONE #: (919) 351-9411

ADDRESS: 1000 CRESCENT GREEN, SUITE 101

CARY, NC 27518

BOOK: 019205 PAGE: 01597 - 01603

Rtn.

- I. **Monthly** or after every runoff producing rainfall, whichever comes first:
 - a. Remove debris from bioretention area.
 - b. Inspect for ponding, washed-out areas, and soil conditions.
 - c. Check for eroded areas of bioretention area and repair before next rainfall.
 - d. Check vegetation conditions within the bioretention area and replace if necessary any damaged plant materials.

- II. **Quarterly**
 - a. Inspect the collection system (i.e., catch basin, piping, grassed swales) for proper functioning.
 - b. Clear accumulated trash from basin grates, and basin bottoms, and check piping for obstructions.
 - c. Check bioretention inlet pipes for undercutting. Repair if necessary.
 - d. Repair any broken pipes.
 - e. Remulch any void areas by hand whenever needed.
 - f. Replace rip rap at out let pipe that is choked with sediment.

- III. **Semi-Annually**
 - a. Reseed grass swale or border twice yearly.
 - b. Apply new mulch twice yearly.

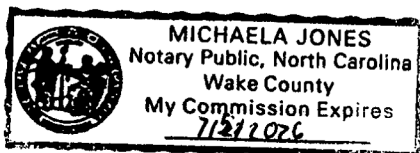
- IV. **General**
 - a. All components of bioretention area to be kept in working order.
 - b. This property and bioretention area is also subject to the Operations and Maintenance Manual filed in relation to this project.
 - c. The maintenance of the stormwater device(s) shall be the sole responsibility of the Owner. The responsibility for the maintenance of the stormwater device shall pass in the chain of title to the Owner's successor in interest.

I, REDFORD 101 LLC, hereby acknowledge that I am the financially responsible party for maintenance of this stormwater device.

I will perform the maintenance as outlined above, as part of the Certificate of Compliance with Stormwater Regulations received for this project.

Signature: *Yusef Hamad* Date: 11.22.22

I, Michaela Jones, do hereby certify that YUSEF HAMAD personally appeared before me this 22nd day of November, 2022 and acknowledge due execution of the foregoing instrument. Witness my hand and official seal,



Michaela Jones

Seal

My commission expires: 7/31/2026

OPERATIONS AND MAINTENANCE AGREEMENT
STORMWATER CONTROL MEASURE
Bioretention

Project: Redford Place Medical Office
 Location: Rolesville, NC
 Owners: Rogers Road 3415, LLC
 Prepared By: Pabst Design Group, PA
 Date: October 2022

Maintenance records of this Stormwater Control Measure are required per Wake County. This maintenance record will be kept in a log in a known set location. Any deficient SCM elements observed 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 SCM.

Important operation and maintenance procedures:

- Immediately after the bioretention cell is established, the plants will be watered twice weekly if needed until the plants become established (commonly six weeks).
- Snow, mulch or any other material will NEVER be piled on the surface of the bioretention cell.
- Heavy equipment will NEVER be driven over the bioretention cell.
- Special care will be taken to prevent sediment from entering the bioretention cell.
- Once a year, a soil test of the soil media will be conducted to determine soil conditions

After the bioretention cell is established, inspection is required **once a month and within 24 hours after every storm event greater than 1.0 inches** 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 problems:	How I will remediate the problem:
The entire BMP	Trash/debris is present.	Remove the trash/debris.
The perimeter of the bioretention cell	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.
The pretreatment area: grass filter strip	Plantings have overgrown their space provided	Follow proper maintenance and trimming techniques for each plant type.
	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.
	Sediment is building up	Remove sediment and restabilize the soil with vegetation or mulch if necessary. Provide lime and a one-time fertilizer application.

BMP element:	Potential problems:	How I will remediate the problem:
	Plants are desiccated	Provide additional irrigation and fertilizer as needed.
	Plants are dead, diseased or dying.	Determine the source of the problem: soil, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application.
	Nuisance vegetation is choking out desirable species.	Remove vegetation by hand if possible. If pesticide is used, do not allow it to get into the receiving water.
The bioretention cell: vegetation	Best professional practices show that pruning is needed to maintain optimal plant	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.
	Tree stakes/wires are present six months after	Remove tree stake/wires (which can kill the tree if not removed).
The bioretention cell: soils and mulch	Mulch is breaking down or has floated away.	Spot mulch if there are only random void areas. Replace whole mulch layer if necessary. Remove the remaining mulch and replace with triple shredded hard wood mulch at a maximum depth of three inches.
	Soils and/or mulch are clogged with sediment.	Determine the extent of the clogging - remove and replace either just the top layers or the entire media as needed. Dispose of the spoil in an appropriate off-site location. Use triple shredded hard wood mulch at a maximum depth of three inches. Search for the source of the sediment and remedy the problem if possible.
	An annual soil test shows that pH has dropped or heavy metals have accumulated in the soil media.	Dolomitic lime shall be applied as recommended per the soil test and toxic soils shall be removed, disposed of properly and replaced with new planting media.
The underdrain system (if applicable)	Clogging has occurred.	Wash out the underdrain system.
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 733-1786.

Underground stormwater detention and infiltration systems must be inspected and maintained at regular intervals for purposes of performance and longevity.

Inspection

Inspection is the key to effective maintenance of CMP detention systems and is easily performed. Contech recommends ongoing, annual inspections. Sites with high trash load or small outlet control orifices may need more frequent inspections. The rate at which the system collects pollutants will depend more on-site specific activities rather than the size or configuration of the system.

Inspections should be performed more often in equipment washdown areas, in climates where sanding and/or salting operations take place, and in other various instances in which one would expect higher accumulations of sediment or abrasive/corrosive conditions. A record of each inspection is to be maintained for the life of the system.

Maintenance

CMP detention systems should be cleaned when an inspection reveals accumulated sediment or trash is clogging the discharge orifice. Accumulated sediment and trash can typically be evacuated through the manhole over the outlet orifice. If maintenance is not performed as recommended, sediment and trash may accumulate in front of the outlet orifice. Manhole covers should be securely seated following cleaning activities. Contech suggests that all systems be designed with an access/inspection manhole situated at or near the inlet and the outlet orifice. Should it be necessary to get inside the system to perform maintenance activities, all appropriate precautions regarding confined space entry and OSHA regulations should be followed.

Annual inspections are best practice for all underground systems. During this inspection if evidence of salting/de-icing agents is observed within the system, it is best practice for the system to be rinsed, including above the spring line soon after the spring thaw as part of the maintenance program for the system.

Maintaining an underground detention or infiltration system is easiest when there is no flow entering the system. For this reason, it is a good idea to schedule the cleanout during dry weather.

The foregoing inspection and maintenance efforts help ensure underground pipe systems used for stormwater storage continue to function as intended by identifying recommended regular inspection and maintenance practices. Inspection and maintenance related to the structural integrity of the pipe or the soundness of pipe joint connections is beyond the scope of this guide.



NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS A WARRANTY. APPLICATIONS SUGGESTED HEREIN ARE DESCRIBED ONLY TO HELP READERS MAKE THEIR OWN EVALUATIONS AND DECISIONS, AND ARE NEITHER GUARANTEES NOR WARRANTIES OF SUITABILITY FOR ANY APPLICATION. CONTECH MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, RELATED TO THE APPLICATIONS, MATERIALS, COATINGS, OR PRODUCTS DISCUSSED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY CONTECH. SEE CONTECH'S CONDITIONS OF SALE (AVAILABLE AT WWW.CONTECHES.COM/COS) FOR MORE INFORMATION.

CONTECH®
CMP DETENTION SYSTEMS

CONTECH®
ENGINEERED SOLUTIONS

STORMWATER CONTROL STRUCTURE UNDERGROUND DETENTION DEVICE MAINTENANCE AGREEMENT

Project: REDFORD PLACE MEDICAL OFFICE
Responsible Party: REDFORD 101 LLC
Phone #: (919) 351-9411
Address: 1000 CRESCENT GREEN, SUITE 101 - CARY, NC 27518

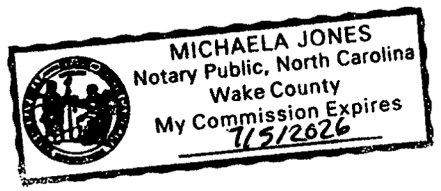
- I. **Monthly** or after every runoff producing rainfall, whichever comes first:
 - a. Remove debris from grates and detention device.
 - b. Check and clear orifice of detention device of any obstructions.
 - c. Inspect the discharge outlets for erosion, debris, ect.
- II. **Quarterly**
 - a. Inspect the collection system (i.e., catch basin, piping, grassed swales) for proper functioning.
 - b. Clear accumulated trash from basin grates, and basin bottoms, and check piping for obstructions.
 - c. Repair any broken pipes or defective joints.
- III. **Semi-Annually**
 - a. Remove accumulated sediment from bottom of outlet structure.
- IV. **General**
 - a. All components of sub-surface storm water detention device are to be kept in working order.
 - b. This property and sub-surface storm water detention device are also subject to the Operations and Maintenance Manual filed in relation to this project if one exists.
 - c. In case the ownership of the detention device transfers, the current owner shall, within thirty (30) days of transfer of ownership, notify the Wake County Environmental Services, Watershed Management Section of such ownership transfer.

I, REDFORD 101 LLC, hereby acknowledge that I am the financially responsible party for maintenance of this structure. I will perform the maintenance as outlined above, as part of the Certificate of Compliance with Stormwater Regulations received for this project.

Signature: *[Handwritten Signature]* Date: 11.22.22
REDFORD 101 LLC, YEZEN S HAMAD, ITS MANAGER

I, Michaela Jones, a Notary Public for the State of North Carolina, County of Wake, do hereby certify that YEZEN S HAMAD personally appeared before me this 22nd day of November, 2022 and acknowledge due execution of the foregoing instrument. Witness my hand and official seal,

Seal *Michaela Jones* My commission expires: 7/5/2026



STATE OF NORTH CAROLINA
WAKE COUNTY

STORMWATER AGREEMENT

THIS AGREEMENT, made and entered into this the 22ND day of NOVEMBER 2022, by and between Wake County, hereinafter referred to as County, and REDFORD 101 LLC, hereinafter referred to as Owner;

WITNESSETH

THAT WHEREAS, Owner is this day accepting responsibility for the stormwater device(s) installed on that certain real property known as 101 REDFORD PLACE DR ROLESVILLE, NC, as shown on the plat thereof recorded in the Book of Maps 17755, Page 1491, Wake County Registry; and

WHEREAS, as a part of the construction of the residence/development the Wake County Environmental Services – Flood and Stormwater Section required that a stormwater device(s) be constructed; and

WHEREAS, the Owner accepts responsibility for the maintenance of the stormwater device(s) as prescribed in the Maintenance Agreement signed and notarized, dated NOVEMBER 22ND, 2022; and

WHEREAS, the Owner grants access to Wake County to inspect the stormwater device(s); and

WHEREAS, the Owner understands that this Agreement shall endure to the benefit of his successors in title, whomsoever they may be in the future.

NOW, THEREFORE, it is understood and agreed by and between the parties:

- 1. The maintenance of the stormwater device(s) shall be the sole responsibility of the Owner.
- 2. The responsibility for the maintenance of the stormwater device shall pass in the chain of title to the Owner's successor in interest.
- 3. Access is granted to Wake County to inspect the stormwater device(s).
- 4. Annually, The Owner shall provide an inspection report from to occur each year beginning one year after _____ (06/30/2022) and each successive year by the 06/30 thereafter.

The report should be faxed to (919) 856-7407 Attention: Environmental Services –Flood and Storm Water Section.

Owner: REDFORD 101 LLC
[Signature] MANAGER
Date: 11.22.22

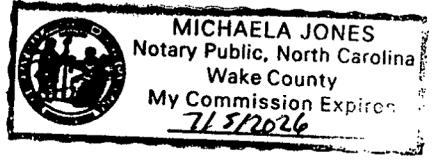
I, Michaela Jones THE UNDERSIGNED notary Public of the County and State aforesaid, certify that YELEN S. HAMAD personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

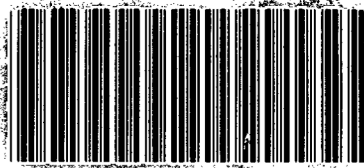
WITNESS my hand and notarial seal, this the 22nd day of November, 2022.

Michaela Jones
Notary Public

My Comm. Exp. 7/5/2026

After recording return to:
Floodplain and Stormwater Management
336 Fayetteville St. PO Box 550
Raleigh, NC 27602





BOOK:019205 PAGE:01597 - 01603



Please retain yellow trailer page

It is part of the recorded document and must be submitted with the original for re-recording.

**Tammy L. Brunner
Register of Deeds**

Wake County Justice Center
300 South Salisbury Street, Suite 1700
Raleigh, NC 27601

New Time Stamp

\$25 Non-Standard Fee

Additional Document Fee

Additional Reference Fee

This Customer Group

_____ # of Excessive Entities

_____ # of Time Stamps Needed

This Document

_____ 7 # of Pages *BW*