

City of Jacksonville, NC

Phase II Stormwater Administrative Manual



City of Jacksonville
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A handwritten signature in black ink that reads "Ronald F. Massey". The signature is written in a cursive style and is positioned above the printed name.

Approved by:
Ronald F. Massey
Interim City Manager

Latest Revision February 4, 2010

Adopted March 1, 2009

City of Jacksonville

Phase II Stormwater Administrative Manual

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Introduction

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, parking lots and streets, prevent stormwater from naturally soaking into the ground. As properties are developed in Jacksonville, the amount of rainwater soaking into the ground is reduced, thus adding more to the stormwater system. Unless properly managed, this increased stormwater runoff can create flooding, erosion and water quality problems. The water quality problems can include: polluted water supplies, loss of native vegetation or habitat, loss of aquatic species of fish and other wildlife, and the loss of safe recreational areas.

The City of Jacksonville's NPDES Phase II Stormwater Program was developed to protect our watershed and improve the nation's water resources from polluted stormwater runoff and in response to the City's Phase II stormwater permit. This permit became effective on March 1, 2007. In accordance with the terms of the permit, a Stormwater ordinance was adopted by City Council on February 3, 2009. With adoption of this ordinance, the City of Jacksonville became the permitting agency for those seeking stormwater permits for new development and redevelopment.

This administrative manual provides forms, checklist and other information which will serve as a guide to those seeking stormwater permits. Additional information in the form of the ordinance and the City of Jacksonville Design Manual are available upon request. Information can also be obtained by contacting the Stormwater Manager at 910-938-6446 or visiting the website at <http://www.ci.jacksonville.nc.us/opencms/opencms/publicservices/Stormwater/>

Overview of the City of Jacksonville Stormwater Permitting Process

Upon submittal of sketch site plans to the City of Jacksonville, the developer will be presented with this Phase II Stormwater Administrative Manual which includes forms and documents necessary to submit a complete Stormwater Permit Application. The application and all necessary information should be submitted to the Planning Board.

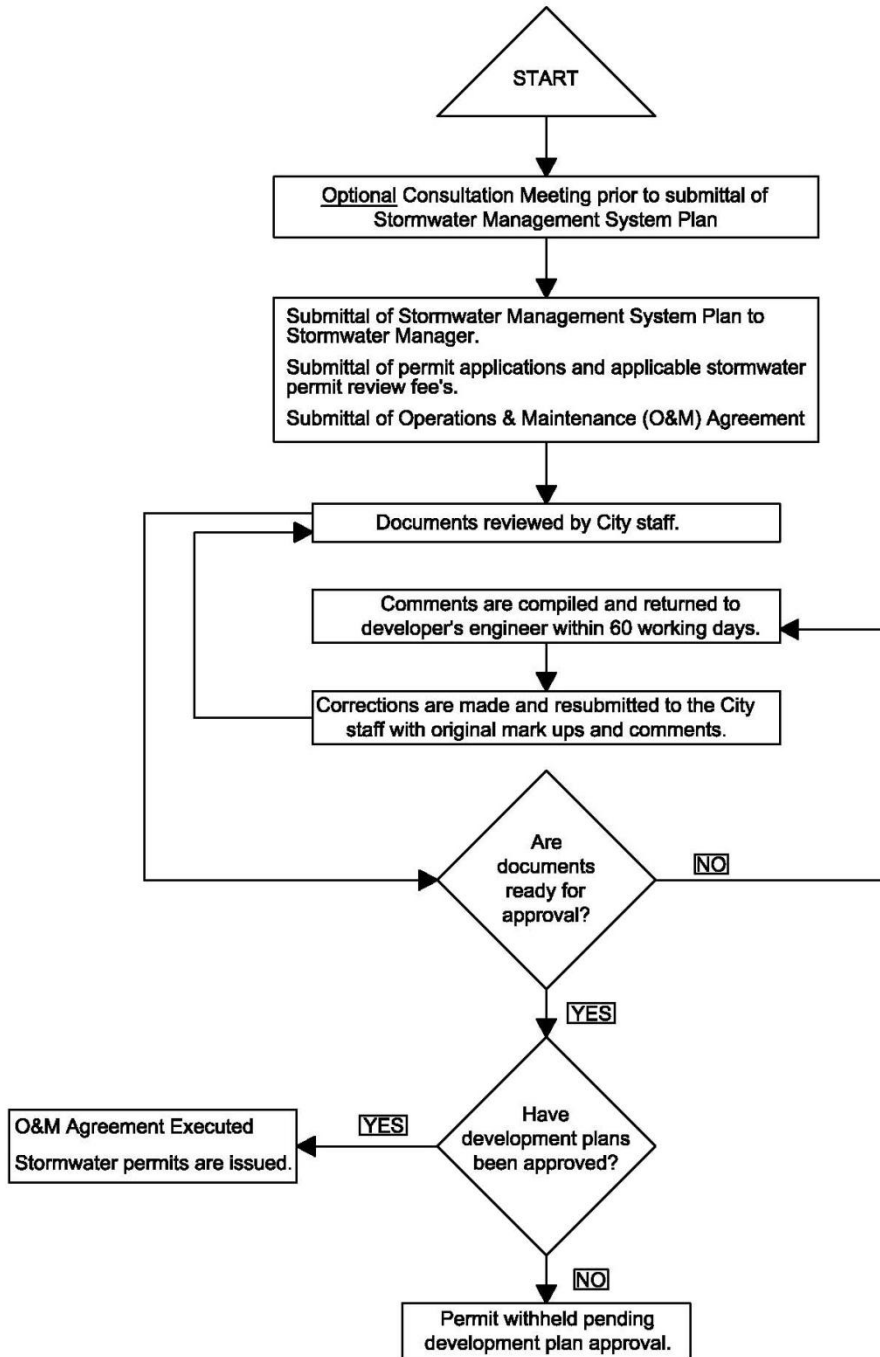
All forms and documents should be filled out completely and accurately in order for the Stormwater Manager and his/her authorized agent to review for issuance of a Stormwater Permit. The completed Operations and Maintenance Agreement (attached) shall be submitted with the application for approval of permit. No permit will be issued without a completed Operation and Maintenance Agreement.

An escrow account for maintenance of the Structural BMP's that are to be or are owned and maintained by a homeowners' association, property owners' association or similar entity shall be established. The design professional shall submit an estimate of construction costs and anticipated maintenance costs for review by the City of Jacksonville. This estimate shall be used by the City to establish the level to which the escrow account should be funded. Unless otherwise approved by the City, the escrow account is to be funded to an amount equivalent to the estimated construction cost(s) of the structural BMP(s). The initial funding of the escrow account by the developer shall be a minimum of 15% of the estimated construction costs of the Structural BMP's. Subsequent funding of the escrow account to its fully funded level shall be through deposits by the Owner/Developer or Association, if one exists, over the next 10 years from the date of certification.

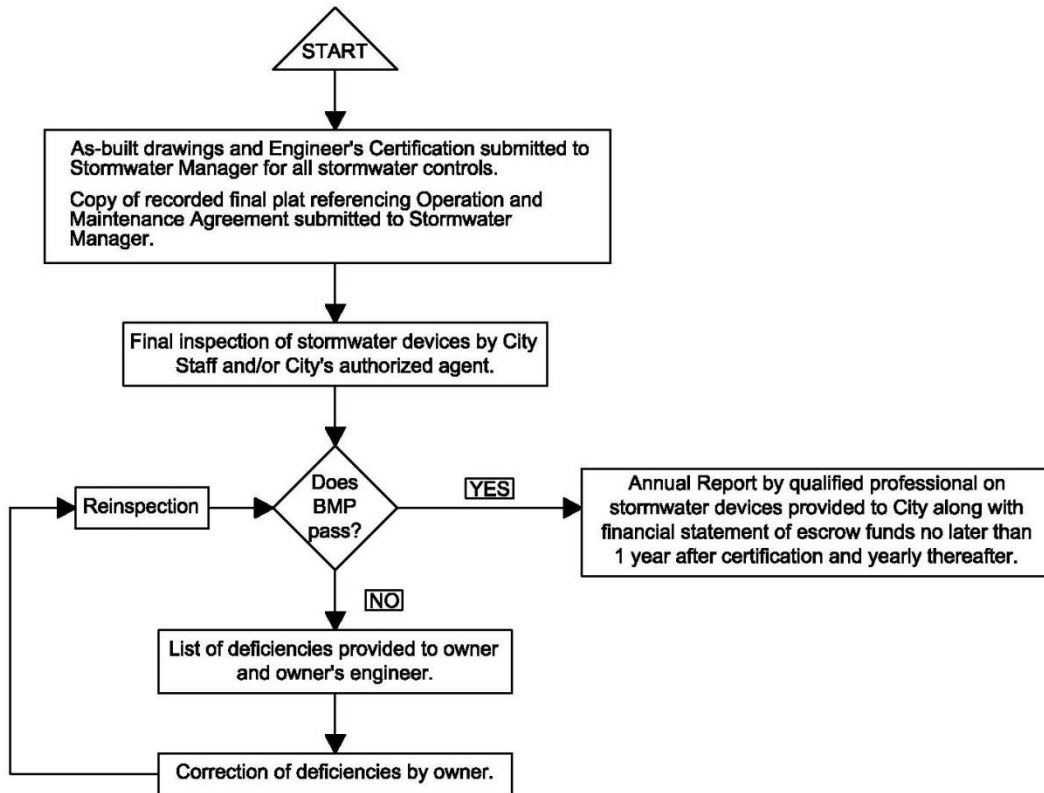
Per the City's Phase II Stormwater Ordinance, the Stormwater Manager or his/her authorized agent has 60 working days in which to conduct the review once the application is considered complete. The Stormwater Manager or his/her authorized agent will notify the developer in a timely manner (generally within one week of receipt of the application) of any missing information. The 60 day review period will not begin until missing information is received. Once all required information is received, the Stormwater Manager or his/her authorized agent will review the submittal. The Stormwater Manager or his/her authorized agent may request additional information or plan revision, issue a Notification of Disapproval, or approve the plans (with or without conditions). If a Notification of Disapproval is issued, the applicant may resubmit a revised plan within 30 working days of disapproval without paying an additional permit review fee. However, if the revised plan is submitted after 30 days, or if the first resubmittal is disapproved, then an additional permit review fee will be charged. Within 30 calendar days resubmitted plans will be either approved (with or without conditions) or disapproved. Requirements for a Performance Security Bond (if required for a project) will be addressed in the approval letter accompanying the Stormwater Permit.

As described in the flow chart (attached), a stormwater permit shall be issued only after the application and accompanying documentation is complete and consistent with all applicable requirements. Additionally, issuance of the permit occurs only after overall development plans have been approved either through the staff level approval process or the City Council approval process.

Stormwater Permit Flowchart



Stormwater Final Certification Flowchart



Stormwater Application Fee Schedule

City of Jacksonville

Stormwater Permitting and Inspection Fees

Adopted by the Jacksonville City Council on February 17, 2009

Application Fee	\$2,200
Re-submittal Fee (Note 1).....	\$ 500
Certification Inspection.....	\$ 550
Re-Inspection (Note 2).....	\$ 475
Permit Renewal	\$ 500
Permit Modification	\$1,500
Offsite Permit.....	\$1,000

Notes:

1. If a notification of disapproval is issued pursuant to receipt and review of a permit application by the City, the applicant may resubmit a revised plan within 30 working days of the disapproval without paying an additional application review fee. However, if the revised plan is submitted after 30 days, or if the first re-submittal is disapproved, then the re-submittal fee shall be paid for each subsequent re-submittal.
2. The City may conduct routine inspections; random inspections; inspections based upon complaints or other notice of violations; and joint inspections with other agencies inspecting under environmental or safety laws. If during an inspection it is determined that a BMP is not in compliance with the City of Jacksonville's ordinance, a re-inspection fee will be charged for each inspection thereafter, until such time as the BMP becomes compliant.



Instructions for Submission of As-Built Plans

Upon completion of a project, and before a certificate of occupancy shall be granted, the applicant shall submit actual “as-built” plans for all stormwater management facilities or practices after final construction is completed.

The plans shall show the final design specifications for all stormwater management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed. A professional authorized by State law to design stormwater management measures and plans or the professional authorized by State law who did design the stormwater management measures and plans shall certify, under seal, that the as-built stormwater measures, controls, and devices are in compliance with the approved stormwater management plans and designs and with the requirements of this ordinance. A final inspection and approval by the Stormwater Manager shall occur before the release of any performance securities.

Stormwater Operation and Maintenance Agreement – Non-Association

Instrument Prepared By: City of Jacksonville Attorney's Office
Brief Description for Index: _____
Parcel Identifier: _____
Mail After Recording To: City Attorney's Office
PO Box 128
Jacksonville, NC 28541

STATE OF NORTH CAROLINA

COUNTY OF ONSLOW

CITY OF JACKSONVILLE'S STORMWATER OPERATION, MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL STORMWATER MANAGEMENT OF BMPS

THE CITY OF JACKSONVILLE'S STORMWATER OPERATION, MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL STORMWATER MANAGEMENT OF BMPS (the "Agreement") made this _____ day of _____, 20____, by and between _____, whose address and telephone number are _____, (hereinafter referred to as "Developer") with, to and for the benefit of the CITY OF JACKSONVILLE, a municipal corporation of the State of North Carolina, whose address is PO Box 128, Jacksonville, North Carolina 28541 (hereinafter referred to as the "City"). Developer, or any subsequent successors and assigns are herein referred to collectively as the "Owners" and individually as "Owner".

WITNESSETH

WHEREAS, the City, under various state and federal laws, is required to regulate the maintenance of Structural BMPs (as defined herein) constructed to serve new or re-development within the City's planning jurisdiction to ensure that, following initial construction, the Structural BMPs are operated, maintained, and to the extent necessary, repaired in accordance with applicable state and federal laws; and

WHEREAS, the City may be subject to substantial regulatory and financial penalties from the State of North Carolina and the federal government if the above-referenced rules and regulations are not applied to new or re-developments occurring within the planning jurisdiction of the City; and

WHEREAS, the City Council of the City of Jacksonville has determined that, to maintain the City of Jacksonville's compliance under applicable state and federal regulations, certain obligations are to be met by Developers and subsequent owners of Structural BMPs; and

WHEREAS, Developer is the owner in fee simple of that certain "Property" situated in Onslow County, North Carolina and more particularly described on Exhibit A; and

WHEREAS, the Property is located within the planning jurisdiction of the City and subject to certain stormwater standards set forth in Jacksonville City Ordinance 2009-07 (the "Ordinance"), as may be amended from time to time; and

WHEREAS, the Developer has submitted construction drawings depicting the Stormwater Area and Structural BMPs (both herein defined), for the purpose of establishing a stormwater management system for the Property, and

WHEREAS, these Structural BMPs are required to comply with the Ordinance and that failure to maintain the Structural BMPs is a violation of the Ordinance potentially subjecting each lot owner of the Property to significant daily civil penalties and other enforcement actions; and

WHEREAS, the City also requires that the Developer grant or dedicate to the City an access and maintenance easement over and across the Property and Stormwater Areas for the purpose of inspecting, maintaining, repairing, reconstructing and replacing the Structural BMPs set forth in the Ordinance and this Agreement; and

WHEREAS, this Agreement has been procured in accordance with the requirements of N.C. General Statutes Chapter 143, Article 21, Part 1 and Jacksonville City Ordinance 2009-07.

NOW, THEREFORE, for a valuable consideration, including benefits Developer may derive there from, the receipt of which is hereby acknowledged, the Owner and City hereby agree as follows:

1. **RECITALS.** The foregoing recitals shall constitute an integral part of this Agreement, and this Agreement shall be incorporated herein and made a part thereof.

2. **PROPERTY.** As required by the City in connection with the development of this Property, the Developer shall install engineered stormwater control structures and other stormwater

structural Best Management Practices (BMPs) and associated appurtenances and vegetation (collectively, the “Structural BMPs”) as shown on the construction drawings prepared by _____, entitled _____ and dated _____ on portion of Property as described in Exhibit B (the “Stormwater Areas”), for purposes of establishing a stormwater management system for the Property, and that Developer assumes specific maintenance, replacement, reconstruction and repair, responsibilities set forth in the Ordinance and with respect to the Structural BMPs; and

3. GRANT OF EASEMENT. Developer hereby dedicate, bargain, sell, grant, and convey unto the City, its successors and assigns, a perpetual, non-exclusive and irrevocable right and easement over, under, through, and across the Stormwater Areas and access through the Property to and from the Stormwater Areas for the purpose of permitting City inspection and, if deemed necessary, as determined by the City, maintenance, replacement, reconstruction, and repair of the Structural BMPs, as more fully set forth herein and in the Ordinance (the “Protection Easement”). Said easement shall be clearly identified and labeled on the approved final plat for Property. Said easements shall be permanent and shall run with the land.

4. CONSTRUCTION AND MAINTENANCE STORMWATER MANAGEMENT FACILITIES. The Developer shall be responsible for the construction of the Stormwater BMPs; and prior to conveying control of the Stormwater Area, their appurtenances and vegetation to another Owner by deed or easement, the Developer will be responsible for maintenance, repair, reconstruction, and replacement thereof in the manner specified herein and in strict compliance with the Stormwater Ordinance 2009-07 which is incorporated herein by reference and made a part thereof (the “Ordinance”). At all times, the Stormwater BMPs shall perform as designed and shall at all times comply with all applicable laws, ordinances, regulations, rules and directives of governmental authorities.

5. OWNERSHIP AND/OR TRANSFER OF PROPERTY AND STORMWATER AREAS. Developer agrees that it shall not transfer ownership and/or control of the Structural BMPs until construction has been completed in accordance with the Stormwater Permit, as defined in the Ordinance, approved Stormwater Areas and Structural BMPs plans, and the City has inspected and approved the same. In addition, the Developer and any new Owner must request that the Permit for the Structural BMPs be reissued to any subsequent Owner.

The Developer agrees that it shall not transfer, convey, assign or otherwise relinquish or release its responsibility for the operation and maintenance of its Structural BMPs until a Permit has been issued to Developer’s successor, or new owner at which time Developer shall be released from any obligations hereunder arising from events or circumstances occurring after the date the Structural BMPs is transferred and the Permit is reissued to the new Owner of the Property; and

6. INSPECTION. The Developer, its successors and assigns, shall ensure that the Structural BMPs are inspected by one of the following professional services: Qualified Registered North Carolina Professional engineer, surveyor, landscape architect, soil scientist, aquatic biologist, or person certified by the North Carolina Cooperative Extension Service for Stormwater treatment practice inspection and maintenance (the “Professional”). The Professional shall submit the Annual Maintenance and Inspection Report found in the City of Jacksonville Stormwater Administrative Manual which may be amended from time to time, to the City. The inspection report shall be due annually 30 days from the date of the

final structural stormwater BMP construction inspection approval by the City. The inspection shall cover the entire Stormwater Area as well as any Structural BMPs.

7. **USE OF PROTECTION EASEMENT.** The City, its officers, employees, contractors and agents may access the Property and enter the Stormwater Areas for purposes of exercising City's rights hereunder. This Agreement shall in no way obligate the City to maintain, replace, reconstruct and repair the Structural BMPs, and the City shall not be liable to any person, firm, partnership, company, corporation, governmental agency, or entity for the condition or operation of the Structural BMPs. Further, this Agreement shall in no way diminish, limit, or restrict the right of the City to enforce any of its ordinances as permitted by law.

8. **DEFAULT.** If the Developer, or subsequent Owners shall fail to comply with the foregoing requirements or any other obligations imposed herein, in the Ordinance as the same may be amended from time to time, the City, in its sole discretion, may perform such work and recover the costs thereof from the person who is then responsible for the performance of such requirements and obligations provided, however, that, except in cases of emergencies, the City will give the Owner written notification of deadline for correcting the violation and an opportunity to cure the Owner's default hereunder. If the City exercises its right hereunder and maintains, repairs, reconstructs or replaces all or a portion of the Structural BMPs, then following acceptance and payment of the work, the City shall deliver to the Owner written notice of the costs of such work, and the Owner shall pay all such costs within forty-five (45) days after receipt of such notice. Any costs not paid by the Owner to the City within the forty-five (45) day period shall be delinquent, and the Owner shall be considered in default of this Agreement. In the event of such default, the City may either bring an action at law against the Owner for the cost of the work, plus interest at the rate of eight percent (8%) per annum, collection costs, and reasonable attorney fees, or foreclose a lien against the Property, or both.

Any payment required by this Agreement which is not paid to the City within thirty (30) days after its due date shall be delinquent. In the event of such default, the City may bring an action against the Owner for nonpayment plus interest at a rate of eight percent (8%) per year, collection costs, a late payment charge of three hundred dollars (\$300) during the first forty five (45) days of default and five hundred dollars (\$500) thereafter and reasonable attorneys' fees.

The remedies set forth herein are cumulative; the City may, for example, bring an action for collection and foreclose its lien claim.

9. **RESERVATION BY RECORD OWNER.** The Developer and its successors and assigns shall in all other respects remain the owner of the Property, subject to the Protection Easement, and may make all lawful uses of the Property not inconsistent therewith.

10. **NO WAIVER OF RIGHT.** The City does not waive or forfeit the right to take action to ensure compliance with the terms, conditions and purposes of this Agreement by a prior failure to act.

11. **NOTICE.** Written notice as required hereunder shall be provided to the City Manager of the City of Jacksonville at PO Box 128, Jacksonville, NC 28541, and to the Owner at _____

Written notice shall be deemed received four (4) days following its deposit, first class mail, with the United States postal system. In the event notice to the Owner is returned, the City may notify the Owner at the mailing address provided by the Onslow County Tax Assessor.

12. **SUCCESSORS AND ASSIGNS.** The designation of Developer and Owner shall include the heirs, assigns, and successors to the Developer and Owner. The designation of City shall include the assigns and successors to the City.

13. **TERM.** This Agreement shall continue as a servitude running in perpetuity with the Property.

14. **CONTROLLING LAW.** This Agreement is to be governed by the laws of the State of North Carolina. Any and all applicable laws, rules, and regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts will be construed pursuant to the laws of the State of North Carolina. All claims and disputes arising from any contract shall be construed pursuant to the laws of the State of North Carolina. The State of North Carolina is the proper jurisdiction for all claims and disputes arising under any contract and the proper venue is the Onslow County Superior Court.

15. **INDEMNIFICATION.** Developer and successors and assigns agree to protect, defend, indemnify and hold the City, its officers, employees and agents free and harmless from and against any losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities in connection with or arising out of this Agreement and/or the performance hereof that are due to the negligent acts of the Developer, its officers, employees, or agents.

TO HAVE AND TO HOLD the aforesaid rights, privileges and easements herein to the City, its successors and assigns forever, and Developer does covenant that Developer are seized of said premises in fee or by easement and have the right to convey the same, the Developer will warrant and defend such title to the same against claims of all persons whosoever.

IN WITNESS WHEREOF, the Developer and City have executed this Agreement and under seal as of the day and year first above written.

DEVELOPER:

By: _____ (SEAL)

Name: _____

Its: _____ (Title)

STATE OF NORTH CAROLINA
COUNTY OF _____

DEVELOPER
ACKNOWLEDGEMENT

I, the undersigned Notary Public, certify _____
personally came before me this day and acknowledged he/she is the (title) _____
_____ of _____
(name of entity) a (circle one) corporation, limited liability company, general partnership and the he/she
as such officer being authorized to do so executed the foregoing instrument on behalf of said entity.

WITNESS my hand and official stamp seal this the _____ day of _____, 20__.

(SEAL)

Notary Public
My Commission Expires: _____

CITY OF JACKSONVILLE:

By: _____ (SEAL)

Name: Ronald F. Massey

Its: Interim City Manager (Title)

ATTEST: _____
City Clerk

STATE OF NORTH CAROLINA
COUNTY OF ONSLOW

INTERIM CITY MANAGER
ACKNOWLEDGEMENT

This is to certify that on the _____ day of _____, 20____, before me personally came _____, with whom I am personally acquainted, who, being by me duly sworn, says that she is the City Clerk and Ronald F. Massey is the Interim City Manager of the City of Jacksonville, the municipal corporation described in and which executed the foregoing; that she knows the corporate seal of said municipal corporation; that the seal affixed to the foregoing instrument is said corporate seal, and the name of the municipal corporation was subscribed thereto by the said City Clerk and that the said corporate seal was affixed, all by order of the governing body of said municipal corporation, and that the said instrument is the act and deed of said municipal corporation.

WITNESS my hand and official stamp seal this the _____ day of _____, 20____.

(SEAL)

Notary Public
My Commission Expires: _____

APPROVED AS TO FORM:

City Attorney

Date

LIST OF EXHIBITS

- Exhibit A “Property” Legal description of Property or Reference to recorded map
- Exhibit B “Stormwater Area” – Description of Area where structural BMPs are to be constructed.

Stormwater Operation and Maintenance Agreement - Association

Instrument Prepared By: City of Jacksonville Attorney's Office
Brief Description for Index: _____
Parcel Identifier: _____
Mail After Recording To: City Attorney's Office
PO Box 128
Jacksonville, NC 28541

STATE OF NORTH CAROLINA

COUNTY OF ONSLOW

CITY OF JACKSONVILLE'S STORMWATER OPERATION, MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL STORMWATER MANAGEMENT OF BMPS AND ESCROW CONTRIBUTION CONTRACT

THE CITY OF JACKSONVILLE'S STORMWATER OPERATION, MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL STORMWATER MANAGEMENT OF BMPS (the "Agreement") made this _____ day of _____, 20____, by and between _____, whose address and telephone number are _____, (hereinafter referred to as "Developer") and _____

_____, (hereinafter referred to as the "Association") with, to and for the benefit of the CITY OF JACKSONVILLE, a municipal corporation of the State of North Carolina, whose address is PO Box 128, Jacksonville, North Carolina 28541 (hereinafter referred to as the "City"). Developer, Association, Association members or any subsequent successors and assigns are herein referred to collectively as the "Owners" and individually as "Owner".

WITNESSETH

WHEREAS, the City, under various state and federal laws, is required to regulate the maintenance of Structural BMPs (as defined herein) constructed to serve new or re-development within the City's planning jurisdiction to ensure that, following initial construction, the Structural BMPs are operated, maintained, and to the extent necessary, repaired in accordance with applicable state and federal laws; and

WHEREAS, the City may be subject to substantial regulatory and financial penalties from the State of North Carolina and the federal government if the above-referenced rules and regulations are not applied to new or re-developments occurring within the planning jurisdiction of the City; and

WHEREAS, the City Council of the City of Jacksonville has determined that, to maintain the City of Jacksonville's compliance under applicable state and federal regulations, certain obligations are to be met by Developers and subsequent owners of Structural BMPs; and

WHEREAS, Developer is the owner in fee simple of that certain "Property" situated in Onslow County, North Carolina and more particularly described on Exhibit A; and

WHEREAS, the Property is located within the planning jurisdiction of the City and subject to certain stormwater standards set forth in Jacksonville City Ordinance 2009-07 (the "Ordinance"), as may be amended from time to time; and

WHEREAS, the Developer has submitted construction drawings depicting the Stormwater Area and Structural BMPs (both herein defined), for the purpose of establishing a stormwater management system for the Property, and

WHEREAS, these Structural BMPs are required to comply with the Ordinance and that failure to maintain the Structural BMPs is a violation of the Ordinance potentially subjecting each lot owner of the Property to significant daily civil penalties and other enforcement actions; and

WHEREAS, at the completion of the Structural BMPs, the Developer may convey the Structural BMPs and the Stormwater Area to the Association; and

WHEREAS, the City also requires that the Developer grant or dedicate to the City an access and maintenance easement over and across the Property and Stormwater Areas for the purpose of inspecting, maintaining, repairing, reconstructing and replacing the Structural BMPs set forth in the Ordinance and this Agreement; and

WHEREAS, this Agreement has been procured in accordance with the requirements of N.C. General Statutes Chapter 143, Article 21, Part 1 and Jacksonville City Ordinance 2009-07.

NOW, THEREFORE, for a valuable consideration, including benefits Developer and Association may derive there from, the receipt of which is hereby acknowledged, the Owners and City hereby agree as follows:

1. RECITALS. The foregoing recitals shall constitute an integral part of this Agreement, and this Agreement shall be incorporated herein and made a part thereof.

2. PROPERTY. As required by the City in connection with the development of this Property, the Developer shall install engineered stormwater control structures and other stormwater structural Best Management Practices (BMPs) and associated appurtenances and vegetation (collectively, the "Structural BMPs") as shown on the construction drawings prepared by _____, entitled _____ and dated _____ on portion of Property as described in Exhibit B (the "Stormwater Areas"), for purposes of establishing a stormwater management system for the Property, and that Developer and Association assume specific maintenance, replacement, reconstruction and repair, responsibilities set forth in the Ordinance and with respect to the Structural BMPs; and

3. GRANT OF EASEMENT. Developer and Association hereby dedicate, bargain, sell, grant, and convey unto the City, its successors and assigns, a perpetual, non-exclusive and irrevocable right and easement over, under, through, and across the Stormwater Areas and access through the Property to and from the Stormwater Areas for the purpose of permitting City inspection and, if deemed necessary, as determined by the City, maintenance, replacement, reconstruction, and repair of the Structural BMPs, as more fully set forth herein and in the Ordinance (the "Protection Easement"). Said easement shall be clearly identified and labeled on the approved final plat for Property. Said easements shall be permanent and shall run with the land.

4. CONSTRUCTION AND MAINTENANCE STORMWATER MANAGEMENT FACILITIES. The Developer shall be responsible for the construction of the Stormwater BMPs; and prior to conveying control of the Stormwater Area, their appurtenances and vegetation to the Association by deed or easement, the Developer will be responsible for maintenance, repair, reconstruction, and replacement thereof. Following conveyance of the Stormwater Area to the Association, the Association and its members will be responsible for maintaining the Stormwater BMPs, their appurtenances and vegetation in the manner specified herein and in strict compliance with the Stormwater Ordinance 2009-07 which is incorporated herein by reference and made a part thereof (the "Ordinance"). At all times, the Stormwater BMPs shall perform as designed and shall at all times comply with all applicable laws, ordinances, regulations, rules and directives of governmental authorities.

5. OWNERSHIP AND/OR TRANSFER OF PROPERTY AND STORMWATER AREAS. Upon completion of the Structural BMPs, the Developer has the option to convey the Stormwater Area and that portion of the Property on which the structure is located to an Association to be formed for the purpose of administrating the provisions of a declaration of covenants to be imposed upon the Property, which declaration shall fully comply with all requirements of this contract as well as all applicable laws. The Declaration of Covenants, Conditions and Restrictions for Property, in reference to this Contract and all applicable stormwater laws, shall be subject to review and approval by the City of Jacksonville Attorney.

Developer agrees that it shall not transfer ownership and/or control of the Structural BMPs until construction has been completed in accordance with the approved Stormwater Areas, Structural BMPs plans and the Stormwater Permit, as defined in the Ordinance, the City has inspected and approved the

same. In addition, the Developer and Association and any new Owner must request that the Permit for the Structural BMPs be reissued to any subsequent Owner.

The Developer and Association agree that it shall not transfer, convey, assign or otherwise relinquish or release its responsibility for the operation and maintenance of its Structural BMPs until a Permit has been issued to Developer and Association's successor, or new owner at which time Developer and Association shall be released from any obligations hereunder arising from events or circumstances occurring after the date the Structural BMPs is transferred and the Permit is reissued to the new Owner of the Property.

6. INSPECTION. The Owner, its successors and assigns, shall ensure that the Structural BMPs are inspected by one of the following professional services: Qualified Registered North Carolina Professional engineer, surveyor, landscape architect, soil scientist, aquatic biologist, or person certified by the North Carolina Cooperative Extension Service for Stormwater treatment practice inspection and maintenance (the "Professional"). The Professional shall submit the Annual Maintenance and Inspection Report found in the City of Jacksonville Stormwater Administrative Manual which may be amended from time to time, to the City. The inspection report shall be due annually 30 days from the date of the final structural stormwater BMP construction inspection approval by the City. The inspection shall cover the entire Stormwater Area as well as any Structural BMPs.

7. COST ESTIMATES FOR CONSTRUCTION OF STRUCTURAL BMPs. The Developer's Engineer shall submit an estimate of construction costs for review and approval by the City in accordance and regulations with the Ordinance. This cost estimate will be used to establish the level to which the escrow account shall be funded.

8. ESCROW ACCOUNT. For purposes of insuring the availability of funds for the replacement and reconstruction of the Structural BMPs, there shall be the establishment of an escrow account, which can be spent solely for sediment removal, structural, biological or vegetative replacement, major repairs or reconstruction of the Structural BMPs. If the Structural BMPs are not performing adequately or as intended or are not properly maintained, the City, in its sole discretion, may remedy the situation, and in such instances the City shall be fully reimbursed from the escrow account. The escrow account will be funded initially by a lump sum contribution of the Developer (the "Initial Payment"), and thereafter by additional contributions of the Association. The Developer shall deposit the Initial Payment in the escrow account and show proof of at the earlier of:

- (i) Prior to plat recordation of the Property; or
- (ii) Before the issuance of building permits for the construction of improvements on the Property.

The Initial Payment shall be equal to \$_____ dollars (which is equal to fifteen percent (15%) of the initial construction costs of the Structural BMPs). The sinking fund budget is defined as the amount required for the initial construction costs. The Owner shall deposit funds at least annually in equal installments into the escrow account such that at least 2/3 of the total amount of the sinking fund budget, as set forth in the Ordinance, shall be deposited into the escrow account within the first five (5) years and the remaining amount shall be deposited within ten (10) years following initial construction of the Structural BMPs. Funds shall be deposited each year into the escrow account. A portion of the annual assessment of the Association shall include an allocation into the escrow

account. Any funds drawn down from the escrow account shall be replaced by Owner in accordance with the schedule of contribution specified by the City prior to the withdrawal of said funds.

The Association shall provide an annual attestation of the sinking fund performed by a certified public accountant in compliance with GAAP standards, stating the funds available and account activity during the preceding year.

The percent of Developer contribution and lengths of time to fund the escrow account may be varied by the City depending on the design and materials of the Structural BMP.

9. **USE OF PROTECTION EASEMENT.** The City, its officers, employees, contractors and agents may access the Property and enter the Stormwater Areas for purposes of exercising City's rights hereunder. This Agreement shall in no way obligate the City to maintain, replace, reconstruct and repair the Structural BMPs, and the City shall not be liable to any person, firm, partnership, company, corporation, governmental agency, or entity for the condition or operation of the Structural BMPs. Further, this Agreement shall in no way diminish, limit, or restrict the right of the City to enforce any of its ordinances as permitted by law.

10. **DEFAULT.** If the Developer, the Association, Association members or subsequent Owners shall fail to comply with the foregoing requirements or any other obligations imposed herein, in the Ordinance or pursuant to the terms of the Declaration of Covenants, Conditions and Restrictions for the Property as the same may be amended from time to time in accordance with the terms thereof (the "Declaration"), the City, in its sole discretion, may perform such work and recover the costs thereof from either the escrow account or from the Owner who is then responsible for the performance of such requirements and obligations provided, however, that, except in cases of emergencies, the City will give the Owner written notification of deadline for correcting the violation and an opportunity to cure the Owner's default hereunder. If the City exercises its right hereunder and maintains, repairs, reconstructs or replaces all or a portion of the Structural BMPs, then following acceptance and payment of the work, the City shall deliver to the Owner written notice of the costs of such work, and the Owner shall pay all such costs within forty-five (45) days after receipt of such notice. Any costs not paid by the Owner to the City within the forty-five (45) day period shall be delinquent, and the Owner shall be considered in default of this Agreement. In the event of such default, the City may either bring an action at law against the Owner for the cost of the work, plus interest at the rate of eight percent (8%) per annum, collection costs, and reasonable attorney fees, or foreclose a lien against the Property, or both.

The Declaration shall grant the Association the right to impose assessments to pay any monies owed by the Association to the City pursuant to this Agreement; payment of such assessment being secured by a lien against all of the Property upon the filing of a claim of lien by the Association or by the City, as the assignee of the Association's lien rights. The granted lien rights shall be foreclosed in like manner as a mortgage on real estate pursuant to power of sale under Article 2A of Chapter 45 of the General Statutes from and after the time of recording a claim of lien in the Office of the Clerk of Superior Court of the County where the Property is situated, which claim shall state the description of the Property encumbered thereby, the name and address of the Association, the record owners of the encumbered Property at the time the claim of lien is filed, and the amount of the lien claim. The claim of lien shall be recordable any time after default, and the lien shall continue in effect until all sums secured by the lien as herein provided shall by have been fully paid. Such claims of lien shall include all sums that are due and payable when the claim of lien is recorded plus interest at the rate set forth in the Declaration, but not to exceed eighteen percent (18%) per year, collection costs and attorney fees. City

lien claims shall be signed by the City Manager. Upon full payment of all sums secured by such claims of lien, the same shall be satisfied of record.

Any payment required by this Agreement which is not paid to the City within thirty (30) days after its due date shall be delinquent. In the event of such default, the City may bring an action against the Owner for nonpayment plus interest at a rate of eight percent (8%) per year, collection costs, a late payment charge of three hundred dollars (\$300) during the first forty five (45) days of default and five hundred dollars (\$500) thereafter and reasonable attorneys' fees.

The remedies set forth herein are cumulative; the City may, for example, bring an action for collection and foreclose its lien claim.

11. **RESERVATION BY RECORD OWNER.** The Developer and the Association and its members, as applicable, shall in all other respects remain the owner of the Property, subject to the Protection Easement, and may make all lawful uses of the Property not inconsistent therewith.

12. **NO WAIVER OF RIGHT.** The City does not waive or forfeit the right to take action to ensure compliance with the terms, conditions and purposes of this Agreement by a prior failure to act.

13. **NOTICE.** Written notice as required hereunder shall be provided to the City Manager of the City of Jacksonville at PO Box 128, Jacksonville, NC 28541, and to the Owner at _____

Written notice shall be deemed received four (4) days following its deposit, first class mail, with the United States postal system. In the event notice to the Owner is returned, the City may notify the Owner at either (i) the mailing address provided by the Onslow County Tax Assessor; or (ii) the registered agent of the Association on file with the Corporations Division of the Secretary of State's Office if an Owner is a corporation.

14. **SUCCESSORS AND ASSIGNS.** The designation of Developer, Association, and Owner shall include the heirs, assigns, and successors to the Developer, Association and Owner. The designation of City shall include the assigns and successors to the City.

15. **TERM.** This Agreement shall continue as a servitude running in perpetuity with the Property.

16. **CONTROLLING LAW.** This Agreement is to be governed by the laws of the State of North Carolina. Any and all applicable laws, rules, and regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts will be construed pursuant to the laws of the State of North Carolina. All claims and disputes arising from any contract shall be construed pursuant to the laws of the State of North Carolina. The State of North Carolina is the proper jurisdiction for all claims and disputes arising under any contract and the proper venue are the Onslow County Superior Court.

17. **INDEMNIFICATION.** Owners agree to protect, defend, indemnify and hold the City, its officers, employees and agents free and harmless from and against any losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities in connection with or arising out of this Agreement and/or the performance hereof that are due to the negligent acts of the Developer and Association, its officers, employees, or agents.

TO HAVE AND TO HOLD the aforesaid rights, privileges and easements herein to the City, its successors and assigns forever, and Developer and Association do covenant that Developer and Association are seized of said premises in fee or by easement and have the right to convey the same, the Developer and Association will warrant and defend such title to the same against claims of all persons whosoever.

IN WITNESS WHEREOF, the Owners and the City have executed this Agreement and under seal as of the day and year first above written.

DEVELOPER:

By: _____ (SEAL)
Name: _____
Its: _____ (Title)

STATE OF NORTH CAROLINA
COUNTY OF _____

DEVELOPER
ACKNOWLEDGEMENT

I, the undersigned Notary Public, certify _____
personally came before me this day and acknowledged he/she is the (title) _____
_____ of _____
(name of entity) a (circle one) corporation, limited liability company, general partnership and the he/she
as such officer being authorized to do so executed the foregoing instrument on behalf of said entity.

WITNESS my hand and official stamp seal this the _____ day of _____, 20____.

(SEAL)

Notary Public
My Commission Expires: _____

ASSOCIATION:

By: _____ (SEAL)

Name: _____

Its: _____ (Title)

STATE OF NORTH CAROLINA
COUNTY OF _____

ASSOCIATION
ACKNOWLEDGEMENT

I, the undersigned Notary Public, do hereby certify that _____
_____ personally came before me this day and acknowledged he/she is the (title) _____
_____ of _____
Association, Inc., a corporation, and the he/she as such officer being authorized to do so execute the
foregoing instrument on behalf of said entity.

This the _____ day of _____, 20__.

(SEAL)

Notary Public
My Commission Expires: _____

CITY OF JACKSONVILLE:

By: _____ (SEAL)

Name: Ronald F. Massey

Its: Interim City Manager (Title)

ATTEST: _____
City Clerk

STATE OF NORTH CAROLINA
COUNTY OF ONSLOW

INTERIM CITY MANAGER
ACKNOWLEDGEMENT

This is to certify that on the _____ day of _____, 20____, before me personally came _____, with whom I am personally acquainted, who, being by me duly sworn, says that she is the City Clerk and Ronald F. Massey is the Interim City Manager of the City of Jacksonville, the municipal corporation described in and which executed the foregoing; that she knows the corporate seal of said municipal corporation; that the seal affixed to the foregoing instrument is said corporate seal, and the name of the municipal corporation was subscribed thereto by the said City Clerk and that the said corporate seal was affixed, all by order of the governing body of said municipal corporation, and that the said instrument is the act and deed of said municipal corporation.

WITNESS my hand and official stamp seal this the _____ day of _____, 20_____.

(SEAL)

Notary Public
My Commission Expires: _____

APPROVED AS TO FORM:

City Attorney

Date

LIST OF EXHIBITS

- Exhibit A “Property” Legal description of Property or Reference to recorded map
- Exhibit B “Stormwater Area” – Description of area where structural BMPs are to be constructed.
- .

Permit Application and Plan Submittals

Approval of Stormwater Management Plans and Calculations by the City of Jacksonville does not complete the City of Jacksonville review process. All other applicable City Departments, State, and Federal agencies must also approve the plan as warranted. It shall be the sole responsibility of the Owner/Developer/Designer to acquire all applicable approvals.

SUBMITTAL REQUIREMENTS

Four original permit applications and attached permit signed and notarized, including checklist, **four** complete sets of site plan drawings and **four** complete sets of calculations shall be submitted to the City of Jacksonville. The following certifications shall appear on the first Stormwater Management sheet in the plan set or on an attached 8½ X 11 sheet of paper.

DESIGNER'S CERTIFICATION

<p>"I hereby certify that, to the best of my ability, this plan has been prepared in accordance with the latest City of Jacksonville Manual of Specifications and Standard Details and City Code."</p> <p>Signature: _____</p> <p>Printed Name and Title: _____</p> <p>Date: _____ Registration Number: _____</p>

OWNER'S/DEVELOPER'S CERTIFICATION

<p>"I/We hereby certify that all site construction, drainage and grading will be done pursuant to this plan and that the applicable Stormwater Management conditions and requirements of the City of Jacksonville, the State of North Carolina and the Federal Government and its agencies are hereby made part of this plan."</p> <p>Signature: _____</p> <p>Printed Name: _____</p> <p>Title: _____ Date: _____</p>

City Of Jacksonville - Stormwater Submittal Requirements

Date Received _____

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | | Stormwater submittal requirements (page 29) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Stormwater Permitting Fee (page 7) Check #/amount _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Four original Stormwater Operation & Maintenance Agreements for Non-Associations, Pages 1, 3 & 4 filled out, back signed and notarized (pages 10-18) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Four original Stormwater Operation & Maintenance Agreements for Associations with cost estimates for construction of structural BMPs and proof of Escrow Account with 15% initial payment, Pages 1, 3 & 4 filled out, back signed and notarized (pages 19-28) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Four complete sets of design drawings signed and sealed by N.C. Professional Engineer (at least one original) (page 29) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Four complete sets of calculations signed and sealed by N.C. Professional Engineer (at least one original) (page 29) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Designer's Certification Box on first Stormwater Plan Sheet, Signed and sealed by N.C. Professional Engineer (page 29) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Owner's/Developer's Certification Box on first Stormwater Plan sheet, signed (page 29) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Four Permit Applications with Off-Site Permit or Permit attached, signed and notarized (pages 31-43) |
| <input type="checkbox"/> | <input type="checkbox"/> | | Four copies of Checklist for Stormwater Standards (pages 44-57) |

Applicant's Certification

I, _____ (*printed name*) attest that this application for

_____ (*project name*) has been reviewed by me and is accurate and complete to the best of my knowledge. I also understand that if all required parts of this application package are not completed and that if all required supporting information and attachments are not included, this application package will be returned to me as incomplete.

Signature: _____ Date: _____



FOR OFFICE USE ONLY	
Date Received:	_____
Review Fee: \$	_____
Permit No:	_____
Date Issued:	_____

City of Jacksonville Application for Off-Site Stormwater Permit

City of Jacksonville Stormwater Management Plan Review:

A complete stormwater management plan submittal includes a copy of the original stormwater permit for the existing BMP if obtained from DWQ, an Off-Site Stormwater Permit and application for each off-site stormwater treatment system signed and notarized, and plans and specifications showing all stormwater conveyances and drainage details for the project.

I. PROJECT INFORMATION

Project Name: _____

Project Location: Highway/Street: _____

Latitude: _____ Longitude: _____

Property Owner: _____

Property Owner Address: _____

Property Owner Telephone: _____

Total area encompassed by proposed project: _____ ?

How much built upon area (BUA) is proposed by the project? _____ (SF)

Is all drainage from this project directed to the off-site system? (check one): Yes No

If No, How much built upon area will drain to the off-site system? _____ (SF)

II. OFF-SITE SYSTEM INFORMATION (please complete the following information for the off-site system that will treat runoff from your project):

Permit No. _____

Project Name: _____

Type of System (wet pond, infiltration basin, etc.): _____

Lot Number on which system is located (if part of a subdivision): _____ ?

How much BUA draining to the permitted treatment system has been allocated to this project? _____ (SF)

III. REQUIRED ITEMS CHECKLIST

Prior to issuing an off-site permit, verification of the following information must be provided. Initial in the space provided to indicate that the following requirements have been met and supporting documentation is attached. If a requirement has not been met, attach justification.

Applicants Initials

- _____ a. Deed restrictions limiting the built-upon area on the site have been recorded.
- _____ b. Engineers certification for the existing off-site system has been submitted to COJ.
- _____ c. There are no outstanding Notices of Violation for the off-site system.
- _____ d. Off-site system is in compliance with the issued permit.

IV. STORMWATER COLLECTION SYSTEM MAINTENANCE REQUIREMENTS

1. Mowing will be accomplished as needed according to the season. Grass height will not exceed six inches at any time.
2. Accumulated sediment and trash will be removed from the collection system as necessary. Swales and ditches will be reseeded or sodded following sediment removal.
3. Eroded areas of swales and ditches will be repaired and reseeded. Swales and ditches will be revegetated as needed based on monthly inspections.
4. The collection system, including catch basins, curb cuts, velocity reduction devices, and piping, will be inspected monthly or after every significant runoff producing rainfall event. Trash and debris will be cleared away from grates, curb cuts, velocity reduction devices, and piping.
5. The collection system may not be altered in any way without prior approval from the City of Jacksonville.

I acknowledge and agree by my signature below that I am responsible for maintaining the stormwater collection system in accordance with the five maintenance procedures listed above. I agree to notify the City of Jacksonville of any problems with the system or prior to any changes to the system or responsible party.

Print Name and Title: _____

Address: _____

Phone: _____ Date: _____

Signature: _____

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, _____, 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 forgoing document including the stormwater collection system maintenance requirements. Witness my hand and official seal,

Notary Public

My commission expires

SEAL

Permit Holder's Name: _____

Stormwater Permit #: _____

Off-site Permit #: _____

Off Site Permit

SECTION 1. APPROVAL: Having reviewed the application and all supporting materials the City of Jacksonville has determined that the application is complete, and subject to the conditions imposed below, and the proposed development meets the requirements of the City's Phase II Stormwater Ordinance.

SECTION 2. CONDITIONS: Therefore, the above referenced site and land used is hereby approved and subject to all applicable provisions of the City of Jacksonville Phase II Stormwater Ordinance, Sections 3 and 4 of this permit, and the following condition(s) which the City of Jacksonville finds necessary for the proposed development to meet the intent of the ordinance:

1. This permit shall be valid for a period of two years from the date of issuance unless a valid building permit has been issued and maintained for the site or the permit has been revoked by the City of Jacksonville. If, after two years the permitted activity has not begun nor a valid building permit secured, this permit shall expire.
2. All land purchases and transfers necessary to secure the property for development shall be completed prior to recordation of this permit.
3. The development of the tract shall proceed in conformity to all plans, design features, and restrictions submitted as part of the stormwater permit application and kept on file by the City Planning Department except that the City of Jacksonville's Public Services Director may approve *minor* changes to such plans as required by field conditions.
4. The petitioner shall complete all required off-site stormwater improvements and receive approval from the City for such improvements prior to the release of any certificates of occupancy.
5. The petitioner shall submit a Floodplain Development Permit Application and receive approval from the City Planning Department prior to any land disturbance or filling of land located within Special Flood Hazard Areas.
6. The petitioner shall submit a Sedimentation and Erosion Control Plan Application and receive approval from the City of Jacksonville prior to any land disturbance or filling of land.

SECTION 3. VESTED RIGHTS. Approval of this permit confers upon the property the right to develop with the type and intensity of use only as such relates to the requirements of the Phase II stormwater ordinance and in the manner as herein described and as shown on the approved site plan. Development of the property, however, shall be subject to any and all future amendments to this ordinance which do not affect such type and intensity of use and shall proceed in full compliance with all other applicable local, state and federal regulations.

SECTION 4. DEED RESTRICTION-PROTECTIVE COVENANT. The following deed restrictions and protective covenants shall be recorded for all subdivisions, outparcels, and future development prior to the sale of any lot:

ARTICLE [insert number]

STORMWATER OPERATION AND MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL MANAGEMENT OF BMPs AND ESCROW CONTRIBUTION CONTRACT

1. Definitions. As used within this Maintenance Covenant Section, the following words and terms have the following definitions.
 - (a) “Maintain”, “Maintenance”, “Maintaining” or any similar term used herein is defined to include one or more of the following, as the context requires: acquisition, purchase, construction, re-construction, installation, maintenance, inspection, examination, upkeep, cleaning, renewal, alternation, repair, replacement, repainting, remodeling, restoration, removal, improvement, administration, operation, use, planting, mowing, cutting, trimming, pruning, fertilizing, watering and preservation.
 - (b) “Maintenance Covenant” is defined as this Article.
 - (c) “Structural BMPs” is defined collectively as the stormwater control structures and other stormwater structural Best Management Practices (BMPs) and associated appurtenances and vegetation as stipulated on the approved final plat for said Property.
2. Location and Identification of Structural BMPs. A description of the portions of the Property where all the Structural BMPs are located, as well as a description of the Property in the Contract executed between the Association and the City of Jacksonville entitled “City of Jacksonville’s Stormwater Operation, Maintenance, Easement and Access Agreement for Structural Stormwater Management of BMPs and Escrow Contribution Contract” which has been registered at the Onslow County Register of Deeds to run with said Property.
3. Maintenance of Structural BMPs. Structural BMPs shall be maintained by the Association in strict compliance with the Stormwater Ordinance and Agreement. At all times, the Structural BMPs shall comply with all applicable laws, ordinances, regulations, and rules. Membership in the Association is mandatory for each Owner of a Lot with membership being appurtenant to the Lot and running with ownership of the Lot. The Association or its Board of Directors shall levy assessments for the costs and expenses of maintaining the Structural BMPs in further compliance with the City of Jacksonville Stormwater Ordinance and Agreement. Upon compliance with the provisions of Chapter 47F of the North Carolina General Statutes (or any applicable successor provision), all assessments levied against a Lot that remain unpaid for a period of thirty (30) days or longer shall constitute a lien on that Lot.
4. Association Costs and Expenses for Maintenance of Structural BMPs. The costs and expenses of maintaining the Structural BMPs shall be a common expense of the Association and shall include, without limitation, all contribution payment obligations owed to the City of Jacksonville under a Stormwater Agreement covering the Property.
5. Establishment of an Escrow Account. The initial construction cost for the Structural BMP will be used to establish the level to which the escrow account will be funded. The sinking fund budget is established in the Stormwater Maintenance Agreement. Any funds drawn down from the

escrow account shall be replaced in accordance with the schedule of contributions specified by the City of Jacksonville prior to the withdrawal of said funds.

6. Penalties Associated with Failure to Maintain Structural BMPs. Operation and Maintenance of the Structural BMPs must comply with all relevant provisions of the Ordinance, as may be amended from time to time, and the Operation and Maintenance Agreement. Failure to maintain the Structural BMPs is a violation of the Ordinance and may subject each Lot Owner to significant daily civil penalties and other enforcement actions by the City of Jacksonville.
7. Grant of Easement. Association hereby dedicates, bargains, sells, grants, and conveys unto the City of Jacksonville, its successors and assigns, a perpetual, non-exclusive and irrevocable right and easement over, under, through, and across the Stormwater Areas and access through the Property to and from the Stormwater Areas for the purpose of permitting City inspection and, if deemed necessary, as determined by the City, maintenance, replacement, reconstruction, and repair of the Structural BMPs.
8. Joint and Several Liability. Each Owner shall be jointly and severally responsible for maintenance and operation of the Structural BMPs, including payment of any unpaid expenses related to the maintenance of the Structural BMPs and including all interest charges thereon, together with the costs and expenses of collection incurred, including court costs and reasonable attorneys' fees actually incurred.
9. Action for Specific Performance. Recognizing the consequences to the City of Jacksonville of non-compliance with the obligations of this Maintenance Covenant, Association hereby grants the City of Jacksonville the right to seek, in any court of appropriate jurisdiction, judicial action for specific performance of any of the obligations established within this Maintenance Covenant. This right of the City shall not limit any other remedies or enforcement options available to the City under the Ordinance, any other applicable law, or the Stormwater Agreement.

SECTION 5. SEVERABILITY. Invalidation of any one or more of the conditions set forth herein shall not adversely affect the balance of said conditions, which shall remain in full force and effect.

Interim City Manager

Date

**NORTH CAROLINA
ONslow COUNTY**

I, _____, a Notary Public of the aforesaid County and State, certify that _____ personally appeared before me and acknowledged that he is the Interim City Manager for the City of Jacksonville, North Carolina and pursuant to authority duly given, and as an act of the City; he executed this Agreement for the purpose herein expressed.

WITNESS my hand and Notarial Seal this the ___ day of _____, 20____.

(Seal)
NOTARY PUBLIC

My Commission Expires: _____

SEAL

Permit Holder's Name: _____

Stormwater Permit #: _____

Off-site Permit #: _____

I, _____, owner(s) of the subject property, do hereby acknowledge receipt of this Stormwater Permit and agree to the conditions stated within. I further acknowledge that no work may be done pursuant to this Permit except in accordance with all of the conditions and requirements listed and that these conditions and requirements shall be binding upon me and my successors in interest and shall run with the land in perpetuity.

Owner Name

Owner Name

**NORTH CAROLINA
ONSLOW COUNTY**

I, _____, a Notary Public, do hereby certify that _____ [owner Name(s)] personally appeared before me this day and acknowledged that [he/she/they] [is/are] the owner(s) of [address] _____.

WITNESS my hand and Notarial Seal this the ___ day of _____, 20____.

(Seal)
NOTARY PUBLIC

My Commission Expires: _____

SEAL



FOR OFFICE USE ONLY	
Date Received:	_____
Review Fee: \$	_____
Permit No:	_____
Date Issued:	_____

**City of Jacksonville
Application for Stormwater Permit**

Project Information

Project Name: _____

Project Location: Highway/Street: _____

Latitude: _____ Longitude: _____

Property Owner: _____

Property Owner Address: _____

Property Owner Telephone: _____

Deed Book: _____ Page No. _____

PIN # _____ Lot Acreage _____

Purpose of Development: Residential Commercial Other

Existing Impervious Coverage (acres) _____ Proposed Impervious Coverage (acres) _____

High Density Low Density

Applicant Information (Owner/Developer)

Business Name(s): _____

Applicant Name(s): _____

Address: _____

_____ Zip _____

Telephone: _____ Fax: _____

Email Address: _____

Designer Information (Person to contact regarding questions or revisions to the plan)

Company: _____

Contact Name: _____

Address: _____

_____ Zip _____

Telephone: _____ Fax: _____

Email Address: _____

ATTACH PERMIT TO THIS APPLICATION

Permit Holder's Name: _____

Stormwater Permit #: _____

Permit

SECTION 1. APPROVAL: Having reviewed the application and all supporting materials the City of Jacksonville has determined that the application is complete, and subject to the conditions imposed below, and the proposed development meets the requirements of the City's Phase II Stormwater Ordinance.

SECTION 2. CONDITIONS: Therefore, the above referenced site and land used is hereby approved and subject to all applicable provisions of the City of Jacksonville Phase II Stormwater Ordinance, Sections 3 and 4 of this permit, and the following condition(s) which the City of Jacksonville finds necessary for the proposed development to meet the intent of the ordinance:

1. This permit shall be valid for a period of two years from the date of issuance unless a valid building permit has been issued and maintained for the site or the permit has been revoked by the City of Jacksonville. If, after two years the permitted activity has not begun nor a valid building permit secured, this permit shall expire.
2. All land purchases and transfers necessary to secure the property for development shall be completed prior to recordation of this permit.
3. The development of the tract shall proceed in conformity to all plans, design features, and restrictions submitted as part of the stormwater permit application and kept on file by the City Planning Department except that the City of Jacksonville's Public Services Director may approve *minor* changes to such plans as required by field conditions.
4. The petitioner shall complete all required off-site stormwater improvements and receive approval from the City for such improvements prior to the release of any certificates of occupancy.
5. The petitioner shall submit a Floodplain Development Permit Application and receive approval from the City Planning Department prior to any land disturbance or filling of land located within Special Flood Hazard Areas.
6. The petitioner shall submit a Sedimentation and Erosion Control Plan Application and receive approval from the City of Jacksonville prior to any land disturbance or filling of land.

SECTION 3. VESTED RIGHTS. Approval of this permit confers upon the property the right to develop with the type and intensity of use only as such relates to the requirements of the Phase II stormwater ordinance and in the manner as herein described and as shown on the approved site plan. Development of the property, however, shall be subject to any and all future amendments to this ordinance which do not affect such type and intensity of use and shall proceed in full compliance with all other applicable local, state and federal regulations.

SECTION 4. DEED RESTRICTION-PROTECTIVE COVENANT. The following deed restrictions and protective covenants shall be recorded for all subdivisions, outparcels, and future development prior to the sale of any lot:

Permit Holder's Name: _____

Stormwater Permit #: _____

ARTICLE *[insert number]*

STORMWATER OPERATION AND MAINTENANCE, EASEMENT AND ACCESS AGREEMENT FOR STRUCTURAL MANAGEMENT OF BMPS AND ESCROW CONTRIBUTION CONTRACT

1. Definitions. As used within this Maintenance Covenant Section, the following words and terms have the following definitions.

(d) "Maintain", "Maintenance", "Maintaining" or any similar term used herein is defined to include one or more of the following, as the context requires: acquisition, purchase, construction, re-construction, installation, maintenance, inspection, examination, upkeep, cleaning, renewal, alternation, repair, replacement, repainting, remodeling, restoration, removal, improvement, administration, operation, use, planting, mowing, cutting, trimming, pruning, fertilizing, watering and preservation.

(e) "Maintenance Covenant" is defined as this Article.

(f) "Structural BMPs" is defined collectively as the stormwater control structures and other stormwater structural Best Management Practices (BMPs) and associated appurtenances and vegetation as stipulated on the approved final plat for said Property.

2. Location and Identification of Structural BMPs. A description of the portions of the Property where all the Structural BMPs are located, as well as a description of the Property in the Contract executed between the Association and the City of Jacksonville entitled "City of Jacksonville's Stormwater Operation, Maintenance, Easement and Access Agreement for Structural Stormwater Management of BMPs and Escrow Contribution Contract" which has been registered at the Onslow County Register of Deeds to run with said Property.
3. Maintenance of Structural BMPs. Structural BMPs shall be maintained by the Association in strict compliance with the Stormwater Ordinance and Agreement. At all times, the Structural BMPs shall comply with all applicable laws, ordinances, regulations, and rules. Membership in the Association is mandatory for each Owner of a Lot with membership being appurtenant to the Lot and running with ownership of the Lot. The Association or its Board of Directors shall levy assessments for the costs and expenses of maintaining the Structural BMPs in further compliance with the City of Jacksonville Stormwater Ordinance and Agreement. Upon compliance with the provisions of Chapter 47F of the North Carolina General Statutes (or any applicable successor provision), all assessments levied against a Lot that remain unpaid for a period of thirty (30) days or longer shall constitute a lien on that Lot.
4. Association Costs and Expenses for Maintenance of Structural BMPs. The costs and expenses of maintaining the Structural BMPs shall be a common expense of the Association and shall include, without limitation, all contribution payment obligations owed to the City of Jacksonville under a Stormwater Agreement covering the Property.

Permit Holder's Name: _____

Stormwater Permit #: _____

5. Establishment of an Escrow Account. The initial construction cost for the Structural BMP will be used to establish the level to which the escrow account will be funded. The sinking fund budget is established in the Stormwater Maintenance Agreement. Any funds drawn down from the escrow account shall be replaced in accordance with the schedule of contributions specified by the City of Jacksonville prior to the withdrawal of said funds.
6. Penalties Associated with Failure to Maintain Structural BMPs. Operation and Maintenance of the Structural BMPs must comply with all relevant provisions of the Ordinance, as may be amended from time to time, and the Operation and Maintenance Agreement. Failure to maintain the Structural BMPs is a violation of the Ordinance and may subject each Lot Owner to significant daily civil penalties and other enforcement actions by the City of Jacksonville.
7. Grant of Easement. Association hereby dedicates, bargains, sells, grants, and conveys unto the City of Jacksonville, its successors and assigns, a perpetual, non-exclusive and irrevocable right and easement over, under, through, and across the Stormwater Areas and access through the Property to and from the Stormwater Areas for the purpose of permitting City inspection and, if deemed necessary, as determined by the City, maintenance, replacement, reconstruction, and repair of the Structural BMPs.
8. Joint and Several Liability. Each Owner shall be jointly and severally responsible for maintenance and operation of the Structural BMPs, including payment of any unpaid expenses related to the maintenance of the Structural BMPs and including all interest charges thereon, together with the costs and expenses of collection incurred, including court costs and reasonable attorneys' fees actually incurred.
9. Action for Specific Performance. Recognizing the consequences to the City of Jacksonville of non-compliance with the obligations of this Maintenance Covenant, Association hereby grants the City of Jacksonville the right to seek, in any court of appropriate jurisdiction, judicial action for specific performance of any of the obligations established within this Maintenance Covenant. This right of the City shall not limit any other remedies or enforcement options available to the City under the Ordinance, any other applicable law, or the Stormwater Agreement.

Permit Holder's Name: _____

Stormwater Permit #: _____

SECTION 5. SEVERABILITY. Invalidation of any one or more of the conditions set forth herein shall not adversely affect the balance of said conditions, which shall remain in full force and effect.

Interim City Manager

Date

**NORTH CAROLINA
ONslow COUNTY**

I, _____, a Notary Public of the aforesaid County and State, certify that _____ personally appeared before me and acknowledged that he is the Interim City Manager for the City of Jacksonville, North Carolina and pursuant to authority duly given, and as an act of the City; he executed this Agreement for the purpose herein expressed.

WITNESS my hand and Notarial Seal this the ___ day of _____, 20____.

NOTARY PUBLIC (Seal)

My Commission Expires: _____

SEAL

Permit Holder's Name: _____

Stormwater Permit #: _____

I, _____, owner(s) of the subject property, do hereby acknowledge receipt of this Stormwater Permit and agree to the conditions stated within. I further acknowledge that no work may be done pursuant to this Permit except in accordance with all of the conditions and requirements listed and that these conditions and requirements shall be binding upon me and my successors in interest and shall run with the land in perpetuity.

Owner Name

Owner Name

**NORTH CAROLINA
ONSLOW COUNTY**

I, _____, a Notary Public, do hereby certify that _____ [owner Name(s)] personally appeared before me this day and acknowledged that [he/she/they] [is/are] the owner(s) of [address] _____.

WITNESS my hand and Notarial Seal this the ___ day of _____, 20____.

(Seal)
NOTARY PUBLIC

My Commission Expires: _____

SEAL



FOR OFFICE USE ONLY	
Date Received:	_____
Review Fee: \$	_____
Permit No:	_____
Date Issued:	_____

City of Jacksonville Stormwater Permit Name/Ownership Change Form

I. CURRENT PERMIT INFORMATION

Stormwater Permit Number: _____

Project Name: _____

Current Permit Holder's Company Name/Organization: _____

Signing Official's Name: _____ Title: _____
(Person legally responsible for permit)

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____ Fax: (_____) _____

II. PROPOSED PERMITTEE / OWNER / PROJECT / ADDRESS INFORMATION

This request is for: *(Please check all that apply)*

Name change of the owner *(Please complete Items 1, 2 and 3 below)*

Name change of project *(Please complete Item 5 below)*

Change in ownership of the property/company *(Please complete Items 1, 2, 3, and 4 below)*

Mailing address / phone number change. *(Please complete Item 4 below)*

Other *(Please explain)* _____

1. Proposed Permittee's company name/organization: _____

2. Proposed Permittee's signing official's name: _____

3. Proposed Permittee's Title: _____

4. Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____ Fax: (_____) _____

5. New Project Name to be placed on permit: _____

Please check the appropriate box. The proposed Permittee listed above is:

HOA or POA *(Attach a copy of the deed transferring ownership of all common areas.)*

The property owner.

Lessee *(Attach a copy of the lease agreement and complete Property Owner Information on page 4)*

Purchaser *(Attach a copy of the pending sales agreement and complete Property Owner Information on page 4)*

Developer *(Complete Property Owner Information on page 4)*

III. REQUIRED ITEMS

This application package will not be accepted by the City of Jacksonville unless all of the applicable required items listed below are included with the submittal.

- 1. This completed and signed form.
- 2. Legal documentation of the transfer of ownership. *(For Permit Transfers Complete Current Permittee and Proposed Permittee Sections)*
- 3. A copy of the recorded deed restrictions, if required by the permit.
- 4. The designer's certification, if required by the permit and if not already submitted to the City.
- 5. If the Proposed Permittee is a corporation, LLC or General Partnership, provide documentation from the Secretary of State office, which supports the named president, vice president, member, manager or General Partner.
- 5. The \$40.00 processing fee.

IV. CURRENT PERMITTEE'S CERTIFICATION

Please check one of the following statements:

Check here if the Current Owner is only changing the owner name, company name or project name, or the mailing address, and will retain ownership of the permit.

I, _____, the current owner, hereby notify the City of Jacksonville that I am changing my name or company name and/or I am changing my mailing address and/or I am changing the name of the permitted project. I further attest that this application for a name/ownership change is accurate and complete to the best of my knowledge. I understand that if all required parts of this application are not completed and that if all required supporting information and attachments as outlined above are not included, this application package will be returned as incomplete.

Check here if Current Owner is transferring (selling) the property to a new owner and will not retain ownership of the permit.

I, _____, the current owner, am submitting this application for a transfer of ownership for permit # _____. I hereby notify the City of Jacksonville of the sale or other legal transfer of all Structural BMPs associated with this permit. I further acknowledge and attest that I have transmitted, if not already submitted to the City: a copy of the most recent permit, a copy of the Designers Certification, a copy of the approved plans and/or approved as-built plans, a copy of the approved Operation and Maintenance agreement and copies of past maintenance records to the Proposed Permittee named in Sections II and V of this form at the mailing address listed in Section II of this form. I further attest that I assign all rights and obligations as permittee to the Proposed Permittee named in Section V of this form. I understand that this transfer of ownership cannot be approved by the City of Jacksonville unless and until the Structural BMP is in compliance with the permit and the Proposed Permittee signs this form. I understand that in the event the Structural BMP is not in compliance or the Proposed Permittee does not sign this form, the responsibility to bring the facility into compliance and to comply with the terms and conditions of the permit remains with me until such time as the Proposed Permittee signs this form and the City approves it.

Signature: _____ Date: _____

I, _____, a Notary Public for the State of

_____, County of _____, do hereby certify that

_____ personally appeared before me this the

_____ day of _____, 20____, and acknowledge the due execution of the forgoing instrument. Witness my hand and official seal,

Notary Signature

(Notary seal)

V. PROPOSED PERMITTEE CERTIFICATION:

(This section must be completed by the Proposed Permittee for all transfers of ownership)

I, _____, hereby notify the City of Jacksonville that I have acquired through sale, lease or legal transfer, the responsibility for constructing and/or operating and maintaining, the permitted structural BMP. I have examined the permit and inspected all the permitted structural BMPs, and agree to assume the rights and liabilities contained in the permit and to comply with the terms and conditions of the permit.

I attest that I have reviewed this application for an ownership change and it is accurate and complete to the best of my knowledge. I understand that if all required parts of this application are not completed and that if all required supporting information and attachments are not included, this application package will be returned as incomplete.

I further acknowledge and attest that in the event the required facility inspection reveals that the project is not in compliance with the permit, I understand this transfer of ownership will not be approved until the project is brought into compliance. I acknowledge and attest that I have received a copy of the most recent permit, a copy of the designer's Certification, a copy of the approved plans and/or approved as-built plans, a copy of the approved Operation and Maintenance agreement and copies of past maintenance records from the previous permittee. I further acknowledge and agree that I will construct and/or operate and maintain the system per the requirements listed in the permit and in the Operation and Maintenance agreement.

Signature: _____ Date: _____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this the _____ day of _____, 20____, and acknowledged the due execution of the forgoing instrument. Witness my hand and official seal,

Notary Signature (Notary Seal)

Please note that if the Proposed Permittee listed above is not the property owner, the property owner must complete and sign page 4 of this document. Both the lessee / developer and the property owner will appear on the permit as permittees.

VI. PROPERTY OWNER CONTACT INFORMATION AND CERTIFICATION

(If the Proposed Permittee listed in Sections II and V of this form is not the Property Owner, the Property Owner must provide his/her Contact Information below and sign this form)

Printed Name: _____

Organization: _____

Title within the Organization: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Mailing Address: _____
(if different from street address)

City: _____ State: _____ Zip: _____

Phone: () _____ Fax: () _____

Email: _____

I certify that I own the property identified in this permit transfer document and have given permission to the Proposed Permittee listed in Sections II and V to develop, lease or purchase the property. A copy of the lease agreement or pending property sales contract has been provided with the submittal, which indicates the party responsible for the construction and/or operation and maintenance of all structural BMPs.

As the legal property owner I acknowledge, understand, and agree by my signature below, that I will appear as a Permittee along with the lessee/developer and that if the designated Proposed Permittee dissolves their company and/or cancels or defaults on their lease agreement or pending sales contract, responsibility for compliance with the City of Jacksonville Stormwater permit reverts back to me, the property owner. As the property owner, it is my responsibility to notify City of Jacksonville by submitting a completed Name/Ownership Change Form within 30 days of procuring a developer, lessee or purchaser for the property. I understand that failure to operate and maintain all structural BMPs in accordance with the permit is a violation of the City of Jacksonville Ordinance 2009-07.

Signature of the property owner _____ Date: _____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this the _____ day of _____, 20____, and acknowledged the due execution of the forgoing instrument. Witness my hand and official seal,

Notary Signature

(Notary Seal)

CITY OF JACKSONVILLE

Checklist for Stormwater Standards

Plan Requirements (Indicate "N/A" where appropriate):

Yes	No	N/A	Sheet No.	Description	Remarks
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Development Name	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Owner	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Design Firm	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Sealed, Signed and Dated	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Sheet Number	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Date	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Revision Numbers and Dates along with a list of all revisions made	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Designer's Certification	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Owner's/Developer's Certification	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	North Arrow	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Property Lines	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Legend	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Vicinity Map	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Scale (min. at 1"=50')	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	General Description of Project	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	General Description of Erosion Controls	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	General Description of Stormwater Management Facilities	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Project Schedule, Narrative, Sequence of Construction	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Adjacent Property Owners	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Existing Streets, Buildings, etc.	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Wooded Limits	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Wetland Limits	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Water Quality Buffers	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Proposed Public Drainage Easements shown	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Land Use of Surrounding Areas	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Original Contours (2-foot intervals)	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Proposed contours (2-foot intervals) or sufficient number of spot elevations	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Actual Field Survey	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	City/USGS Topographical Data	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Existing Streams, Lakes, etc.	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Size and Location of Existing Culverts	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Size and Location of Proposed Culverts	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Limits of Drainage Area	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Limits of Construction, Clearing & Grading	_____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Existing & Proposed Improvements (including utilities and protective measures)	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Delineation of FEMA 100-yr Floodplain w/i 200 feet of project, 100 year BFE shown	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Location and elevation of the lowest floor in all proposed and existing buildings	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Location of Stormwater Management Facilities (includes details, plan, profile, and cross sections)	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Maintenance plan for stormwater management facilities	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Submitting 7 Set of Plans	_____

Calculation Requirements

Note: Drainage structures should be designed to handle all upstream flow when the basin is fully built out.

Yes	No	N/A	Sheet No.	Description	Remarks
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Development Name	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Owner	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Design Firm	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Sealed, Signed and Dated	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Capacity of receiving channel downstream of channel, pipe or basin system	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Total area, impervious area, CN, Tc, Q _{pre} and, Q _{post} for 10-year/25-year/100- year storms as applicable	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	25-year (where required) flows at cross- street drainage structures	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	10-year and 100-year flood routing analysis through all detention/retention facilities	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Design flows and velocities in open channels	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Quality control computations	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Soils/Geotechnical Report/Analysis (for infiltration facilities)	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Submit 2 Sets of Calculations	_____

Piped Systems*: (For Residential Streets)

Yes	No	N/A	_____	Description	Remarks
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Analyzed and designed for 10-yr Storm	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Designed for 25-year (where required) flows at cross-street drainage structures	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Minimum Velocity = 2.5 FPS	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Headwall or Flared End Sections	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Energy Dissipater Calculations	_____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Capacity of receiving channel downstream of channel or pipe system
 Gutter spread limited to 1/2 lane width from the face of the curb, for a rainfall intensity of 4 inches per hour

Open Channel Systems:

Yes	No	N/A	Description	Remarks
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Capacity analyzed and designed for 10-yr Storm	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lining Designed for 2-yr Storm	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Side Slopes 3 to 1 or flatter	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minimum Bottom Width = 3 Feet	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Velocity Check (Liners provided, if needed)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Capacity of receiving downstream channel	

Other Plan Submittals:

The following permits or items may need to be considered by the designer. Check off those that are applicable to this project. All below shaded items are to be submitted to the City. Other items shall be submitted upon request only.

Yes	No	N/A	Description	Remarks
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maintenance plan for all stormwater facilities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Landscaping details for stormwater management BMP's	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Name and address of entity responsible for maintenance	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Submit Erosion & Sedimentation Control Plan to City of Jacksonville	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Submit permits to NCDOT for encroachments and driveways	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US Army Corps of Engineers 404 permits	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comply with water supply watershed protection ordinance	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Complete survey of threatened or endangered species	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NCDENR, Water Quality permits	

* Contact Public Services Director for requirements if other than Residential Streets.

Comments:

Submittal Worksheet for Dry Detention, Wet Retention, Extended Detention Wetland Basins, and other BMP Facilities:

The City of Jacksonville will follow the City Code and the North Carolina Department of Environment and Natural Resources, Division of Water Quality Stormwater *Site Planning Guidance Manual* and the *Stormwater Best management Practices Handbook* with regard to Dry Detention, Wet Retention Basin, Extended Detention Wetland Basins and other BMP's within the City's jurisdiction. Please provide complete documentation and details where applicable. A complete stormwater management plan submittal includes a worksheet for each basin, design calculations, plan and specifications showing all basin and outlet structure details, and a fully executed operation and maintenance agreement. An incomplete submittal package will result in a request for additional information and will substantially delay final review and approval of the project. Indicate "Not Applicable" where appropriate if design is a dry detention basin.

I. Project Information (please complete the following information):

Project Name: _____

For projects with multiple basins, specify which basin this worksheet applies to:

Basin Bottom Elevation	_____	ft.	(average elevation of the floor of the basin)
Permanent Pool Elevation	_____	ft.	(elevation of the orifice invert out)
Temporary Pool Elevation	_____	ft.	(elevation of the outlet structure invert in)
Permanent Pool Surface Area	_____	sq. ft.	(water surface area at permanent pool elevation)
Drainage Area	_____	ac.	(on-site and off-site drainage to the basin)
Impervious Area	_____	ac.	(on-site and off-site drainage to the basin)
Permanent Pool Volume	_____	cu. ft.	(combined volume of main basin and forebay)
Temporary Pool Volume	_____	cu. ft.	(volume detained on top of the permanent pool)
Forebay Volume	_____	cu. ft.	(volume detained on top of the forebay pool)
Average Pond Depth	_____	ft.	(average depth of permanent pool)
SA/DA used	_____		(surface area to drainage area ratio)
Diameter of Orifice and Number	_____	in./	(draw down orifice diameter and number of)
SHWT elevation	_____	ft.	(elevation of seasonal high water table)

II. Required Items Checklist

Initial in the space provided to indicate the following design requirements have been met and supporting documentation is attached. *If a requirement has not been met, attach an explanation of why.*

Applicant's Initials	Dry Detention Basin, Wet Detention Ponds & Extended Detention Wetlands
_____	Sizing shall take into account all runoff at ultimate build-out including off-site drainage.
_____	A minimum length to width ratio of 1.5:1 is required. 3:1 is preferred.
_____	All built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters.
_____	Flood control goal: Pond outflow from principle outlet structure must not exceed the 10-year storm pre-development flow or 25 year storm in areas with a history of localized flooding problems.
_____	Vegetated side slopes are no steeper than 3:1.
_____	The forebay and main pond shall have a minimum of 1 foot sediment storage
_____	Freeboard shall be a minimum of 1 foot above the maximum stage of the basin
_____	Emergency spillway safely passes the 100-year design storm across a stabilized spillway
_____	The storage for flood control located above the temporary storage pool.
_____	Outlet structure checked for buoyancy.
_____	Splitter plate and trash rack provided on principle outlet structure.
_____	Considered features to prevent piping and internal erosion problems around the spillway/outlet conduit through an embankment system.
_____	Access is provided for maintenance
_____	Design checked and certified for structural integrity and floodplain impacts for the 100-yr Storm
_____	A site specific operation and maintenance (O&M) plan is provided.
_____	A vegetation management/mowing schedule is provided in the O&M plan
_____	A debris check is specified in the O&M plan after every storm event
_____	Semi-annual inspections are specified in the O&M plan
_____	The Operation & Maintenance checklist is specified in the O&M plan to be performed after every storm event.
_____	A responsible party is designated in the O&M plan

**Applicant's
Initials**

Wet Detention Ponds

(items to be added to Dry Detention pond requirements to yield a Wet Detention Pond)

SA/DA is based on 85% or 90% TSS removal (based on Coastal Counties Tables).

The temporary pool, located above the permanent pool, sized to detain the runoff volume from the 1.5" of runoff ("first flush"). The 1.5" draws down in a minimum of 2 to 5 days.

The average depth of the permanent pool shall be a minimum of 3 feet.

The forebay volume is approximately equal to a minimum of 20% of the total basin volume

The storage for flood control located above both the permanent and temporary (1.5") water quality pools.

A minimum 10-foot wide vegetated shelf shall be installed around the perimeter. The inside edge of the shelf shall be 6" below the permanent pool elevation; the outside edge of the shelf shall be 6" above the permanent pool elevation.

The pond shall be designed with side slopes and vegetated slopes no steeper than 3:1.

Basin discharge shall be evenly distributed across a minimum 30 feet long vegetative filter strip unless it is designed to remove 90% TSS. (A 50-ft filter is required in some locations.)

A specific sediment clean-out benchmark is listed (elevation or depth) in the O&M plan

BMP shall not be located to produce adverse impacts on water levels in adjacent wetlands.

The permanent pool elevation shall be within 6 inches (plus or minus) of the SHWT elevation.

**Applicant's
Initials**

Extended Detention Wetlands

(additional items applicable to Extended Detention Wetland Basins)

Determine the surface areas of the pond using 3 foot depth (this does not mean the pool depth will be 3 feet deep! It is for pool area computation only) 70% of pool area is designed as a marsh with a depth of 0 to 18" with an almost equal distribution of area (35% and 35%) between 0 to 9" and 9" to 18".

A small pool (15% of the surface area) is located at the outlet to prevent sediment from interfering with the outlet structure functions.

15% forebay

Plant specification and installation of plants shown (it is not necessary to plant cattails as they will volunteer on their own).

Contour pond using 0.5 foot contours.

The shelf from the normal pool elevation contour inward needs to be 6:1 on the perimeter only. Once away from the shelf areas, contours can vary as desired. Minimum shelf width = 10 feet.

Applicant's
Initials

Pocket Wetlands in combination with Grassed Swales

Sizing process follows wet detention basin guidelines but shall incorporate Table 2.1 (below). An average of 2 feet is assumed.

Imperviousness (%)	SA/DA (%)
<70	0.75
70	0.80
75	0.85
80	0.91
85	0.96
90	1.02
95	1.07
100	1.12

Capture the runoff from the 1-year 24 hour storm and release it over a period of 48 hours or,

Capture the runoff from the 1.5" storm and allow it to draw down over a period of 2 to 5 days.

Average depth no more than 2 feet.

Pond area distribution:

High Marsh (0-6 inch depth) = 50%

Low Marsh (6-12 inch depths) = 40%

Open water (>18 inch depth) = 10%

Cleanout access provided

Drain provided to completely drain the basin for cleanout

Peak flow control to accommodate 10-year storm pre-development flow, and 25-year storm when required.

Vegetation plan prepared by a NC licensed professional Landscape Architect, Engineer, or Architect giving special consideration to the species specified due to frequent inundations.

The plans must specify that the wetland must be stabilized within 14 days of construction with final vegetation or temporary means until vegetation can become established.

Plunge pool, riprap or other measure provided at inlets to prevent re-suspension of sediments.

Pocket wetlands that receive runoff from anything other than vegetated filters or swales must incorporate a forebay.

O&M specifies that the top few inches of sediment is stockpiles so that it can be replaced over the surface of the wetland after completion of sediment removal to reestablish through its own seedbank.

O&M specifies cleanout at 6 inches.

III. A Checklist for Other BMP Measures (please complete the following information):

Applicant's Initials	Level Spreaders
_____	Entire system passes the 10-year storm without causing erosion, gullies, or rills.
_____	Slope of the natural ground away from or parallel to the level spreader is relatively smooth in the direction toward the stream so that flow will not re-concentrate.
_____	Minimum length = 10 feet; maximum length = 300 feet
_____	Level spreader is level
_____	Type and amount of vegetative cover considered

Applicant's Initials	Sand Filter
_____	Sizing shall take into account all runoff at ultimate build-out including off-site drainage.
_____	Vegetated side slopes shall be no steeper than 3:1
_____	BMP shall be located in recorded drainage easement with a recorded access easement to a public ROW.
_____	Seasonally high groundwater table must be at least 2 feet below the bottom of the filter for open-bottom designs.
_____	Volume in excess of the design volume, as determined from the design storm, shall bypass the sand filter.
_____	Volume in excess of the design volume, as determined from the design storm, shall be evenly distributed across a minimum 30 feet long vegetated filter strip. (A 50-ft filter is required in some locations.) IF this cannot be attained, alternate designs will be considered on a case by case basis.
_____	The design shall be located a minimum of 30 feet from surface waters, and 50 feet from class SA waters.
_____	The design shall be located a minimum of 100 feet from water supply wells.
_____	Seasonally high groundwater table must be at least 1 foot below the bottom of the filter for closed filter designs in order to prevent draining the water table and floatation. Exceptions will be made if these concerns are mitigated.
_____	Maximum contributing drainage basin is 5 acres.
_____	Minimum width (parallel to flow) of a sedimentation chamber or forebay shall be 1.5 feet.
_____	Sand filter must completely drain within 40 hours.
_____	Sand media shall be as specified below and shall be a minimum of 18" deep (minimum of 12" over the drainage pipes).
_____	For underground sand filters, provide at least 5 feet of clearance between the surface of the sand filter and the bottom of the roof of the underground structure.

Applicant's Initials	Bioretention Areas
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(Design generally complies with the requirements of DWQ's *Stormwater Best Management Practices*, Section 4.0 – *Bioretention Areas*)

_____	Minimum functional width of 15 feet (25 feet preferable)
_____	Minimum length 40 feet. For widths equal or greater than 20 feet, the length of the bioretention area should be at least 2 times the width (to permit sheet flow to be dispersed over a greater distance).
_____	Maximum depth of ponded area = 6 inches
_____	Minimum depth of planting soil = 4 feet
_____	Bioretention area < 5 acres. 0.25-acre to 1.0-acre bioretention basins sizes may be required where high erosive velocities occur.
_____	Drainage area sized for sheet flow for the 10-year storm.
_____	Sheet flow into basin < 5 fps. If not, provisions made to prevent erosion of vegetated areas.
_____	^a Bioretention area = 5% of the drainage area multiplied by the Rational "C" coefficient when sand bed used. See standard detail <u>641.01</u> .
_____	^a Bioretention area = 7% of the drainage area multiplied by the Rational "C" coefficient when sand bed is not considered appropriate. See standard detail <u>641.01</u> .
_____	Runoff entering bioretention area in form of sheet flow.
_____	First flush accomplished through curb openings of 3 feet width with a diversion block in front of the curb opening and using a drainage area of 1 acre (based on commercial land use with runoff coefficient of 0.8 using HEC-12). Multiple curb openings provided when longitudinal curb slope exceeds 7%.
_____	Maximum sheet flow velocity for planted ground = 3 fps; for mulched cover, 1 fps. (Note: velocity from 3-foot curb opening draining a 1-acre commercial tract is 0.5 fps and thus non-erosive to either type of cover).
_____	Water table > 6 feet from the land surface desired.
_____	Grassed buffer strip and sand bed (Desired where space constraints allow). See standard detail <u>641.02</u> .

Applicant's Initials	Infiltration devices
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_____	Sizing shall take into account all runoff at ultimate build-out including off-site drainage.
_____	Side slopes stabilized with vegetation shall be no steeper than 3:1.
_____	BMP shall be located in a recorded drainage easement with a recorded access easement to a public ROW.
_____	If the BMP is used for sedimentation and erosion control during construction, it must be cleaned out and returned to the design state.
_____	The design shall be located a minimum of 30 feet from surface waters, and 50 feet from Class SA waters.
_____	The design shall be located a minimum of 100 feet from water supply wells

- _____ The bottom shall be a minimum of 2 feet above the seasonal high water table.
- _____ Volume in excess of the treatment volume, as determined from the design storm, shall bypass the device.
- _____ Volume in excess of the treatment volume, as determined from the design storm, shall be evenly distributed across a minimum 30 feet long vegetated filter strip. (A 50-ft filter is required in some locations.)
- _____ The storage volume must completely draw down to the seasonable high water table under seasonally high water conditions within 5 days.
- _____ Soils must have a minimum hydraulic conductivity of 0.52 inches per hour to be suitable for infiltration.
- _____ Device must not be sited on fill material.
- _____ Trenches must be shallower than their largest surface dimension to prevent categorization as an "injection well."
- _____ BMP shall be installed at a 0-0.05% grade (level).
- _____ BMP shall be located a minimum of 15 feet down gradient of any structure.
- _____ A single device shall handle a maximum of 2 acre-inches of runoff.
- _____ The bottom shall min. of 2 feet above any underlying impervious soil horizon or bedrock.
- _____ BMP shall be used only after entire upstream area has been stabilized.
- _____ BMP shall not be used on industrial sites or designated contaminated land uses or activities such as areas subject to frequent oil or other petroleum contamination.
- _____ Pretreatment devices must be provided.
- _____ Trench depths must be between 3 and 8 feet.
- _____ Minimum of 1 observation well shall be provided.

Applicant's Initials	Permeable Pavements
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- | | |
|-------|---|
| | Must capture and infiltrate runoff from the first 1.5 inches of rainfall |
| _____ | Storage volumes indicated on plans/calculations and volumes account for slope of pavement structure |
| _____ | Pavement slope designed to be as flat as possible with slopes not exceeding 0.5% |
| _____ | The seasonally high water table must be at least 2 feet from the base (bottom) of the permeable pavement or gravel storage layer. |
| _____ | Permeable pavement is not designed to receive concentrated flows |
| _____ | Construction sequence insures that the surface installation is planned to be completed after adjacent areas are stabilized with vegetation. |
| _____ | Drainage time for storm is minimum 12 hours to maximum of 72 hours, recommended at 24 hours |
| _____ | Run-on to the pavement from offsite areas is not allowed. Adjacent fine |

_____ grained soils should be prevented from draining to the porous pavement
 _____ The top 3 feet of soil must have no finer texture than Loamy Very Fine Sand
 _____ as determined by a soil analysis
 _____ Only 2 acre-feet of soil per acre disturbed can be graded for the permeable
 _____ pavement footprint.
 _____ On-site soils tested for porosity, permeability, and cation exchange should be
 _____ performed on the soil horizon located beneath the base of the pavements
 _____ system to a minimum depth of 3 feet.
 _____ Minimum infiltration rate of the footprint of the permeable installation must
 _____ have a vertical saturated hydraulic conductivity of at least 0.52 inches per hour
 _____ (as determined by a soil analysis) for the soil horizon located beneath the
 _____ base of the pavement system to a minimum depth of 3 feet.
 _____ Geotextile fabric provided on the subgrade to prevent migration or
 _____ transportation of fine grained soils
 _____ Maintenance issues covered in an operations and maintenance plan

Applicant's Initials	Filter Strip
_____	Sizing shall take into account all runoff at ultimate build-out including off-site drainage.
_____	The BMP shall be located in a recorded drainage easement with a recorded access easement to a public ROW.
_____	A distribution device shall be used to provide even distribution of runoff across the BMP.
_____	The filter strip must be densely vegetated.
_____	An appropriately licensed design professional must prepare the grading and vegetation plan.
_____	The length and width of a filter strip shall be in accordance with the requirements of the applicable stormwater regulatory program.
_____	Sustained sheet flow is required, typically through the use of a concrete level spreader.

Applicant's Initials	Restored Riparian Buffer
_____	Sizing shall take into account all runoff at ultimate build-out including off-site drainage.
_____	BMP shall be located in a recorded drainage easement with a recorded access easement to a public ROW.
_____	The buffer must be constructed directly adjacent to a perennial or intermittent surface water as shown on the most recent NRCS Soil Survey or the USGS 1:24,000 scale (7.5 minute) quadrangle topographic map.

_____ The existing riparian buffer must be “impaired.” An “impaired” riparian buffer includes: fields and pastures that have been actively used within the last 3 years, and wooded buffers that have been cutover within the last 5 years or where the woody vegetation is absent or sparse (less than 100 stems per acre that are greater than 5 inches diameter at breast height).

_____ The restored riparian buffer must be used only when the flow to the level spreader is less than 3 cfs. This flow could be coming directly from the drainage area during the one inch per hour storm or the drawdown flow from another BMP.

_____ Level spreaders (designed in accordance with Chapter 8 of this Manual) are required if it cannot be proven that the stormwater entering the riparian buffer is sheet flow.

_____ The width shall be 50 feet, which must be divided into two zones. The 30 feet closest to the stream (Zone 1) must be wooded and the outer 20 feet (Zone 2) must be grassed.

_____ The buffer must be a minimum of 13 feet and a maximum of 130 feet in length, and is set by the level spreader length requirements.

_____ The slope of a riparian buffer must not be greater than 6%.

Applicant's Initials	Rooftop Runoff Management
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_____	A vegetation plan prepared by a horticulturalist versed in green roof vegetation is required.
_____	A structural engineer must be consulted and verify roof and structure strength.
_____	Access to the roof is required for inspection and maintenance.
_____	On a roof slope greater than 20 degrees, horizontal strapping or other support systems must be installed to avoid slippage and slumping of the growing medium and plants.

**Applicant's
Initials**

Rainwater Harvesting Systems - (Cisterns)

(*Applicants intending to receive credit for peak runoff attenuation and runoff volume reduction shall follow criteria set out in the current N.C. Stormwater BMP Manual. All relevant information shall be submitted with the stormwater permit application.)

Plans and details (prepared by a licensed Professional Engineer or Landscape Architect)

Water Harvesting Supplement Form (from N.C. Stormwater BMP Manual)

System model input and output (prepared by a licensed Professional Engineer or Landscape Architect)

System design calculations, including volume and storage calculations, pump, overflow, gutter, and downspout sizing calculations (prepared by a licensed Professional Engineer or Landscape Architect)

Water balance calculations for dedicated uses (prepared by a licensed Professional Engineer or Landscape Architect)

Buoyancy calculations for underground systems (prepared by a licensed Professional Engineer or Landscape Architect)

Operation & Maintenance Plan to be supplied to the owner (this must include information for the owner about dedicated use requirements)

**Applicant's
Initials**

Downspout Dispersion blocks

A vegetated flowpath at least 50 feet in length as measured from the downspout to the downstream property line, structure sensitive steep slope, stream, wetland, or other impervious surface

The vegetated flowpath must be covered with well-established lawn or pasture, landscaping with well-established groundcover, or native vegetation with natural groundcover.

Flows shall not be directed onto sidewalks

A maximum of 700 square feet of roof area may drain to each splashblocks

A splashblock or a pad of crushed (2 ft wide by 3 ft long by 6 in deep) shall be placed at each downspout discharge point

No erosion or flooding of downstream properties may result

Splashblocks may not be placed on slopes greater than 20% or above erosion hazard areas without evaluation by a qualified geotechnical engineer and approval of the City

For sites with septic systems, the discharge point must be down slope of the primary and reserve drain field areas. This requirement may be waived by the City if site topography clearly prohibits flows from intersecting the drain field or where site conditions indicate that this is unnecessary

If the vegetated flowpath (measured as defined above) is less than 25 feet on a subdivision single-family lot, a perforated stub-out connection may be used in lieu of downspout dispersion.

^a Sizing rule based on the bioretention area infiltration precipitation events of 0.5 to 0.7 inches occurring over a 6-hour time period.

**Applicant's
Initials**

Proprietary Systems

Sizing shall take into account all runoff at ultimate build-out including off-site drainage. BMP shall be located in a recorded drainage easement with a recorded access easement to a public ROW.

The BMP may not be located within one mile of and draining to waters classified as HQW; including waters classified as ORW, WS-I, WS-II, SA, and Primary Nursery Areas (PNA).

Monitoring is required to verify the installed performance of the BMP. Alternative stormwater treatment measures must be available and must be installed, upon DWQ's determination that the BMP has failed.

An operation and maintenance plan is required.

The system must be designed by a professional licensed in North Carolina. The design professional must also certify that he inspected the system during construction; that the installation conformed to the approved plans and specs; and that the system meets the requirements of the rules.

Additional design and performance monitoring requirements will be developed on a case-by-case basis by DWQ.

**Applicant's
Initials**

Grassed Swales

Sizing shall take into account all runoff at ultimate build-out including off-site drainage.

The BMP shall be located in a recorded drainage easement with a recorded access easement to a public ROW.

The design must non-erosively pass the peak runoff rate for the 10-year storm.

Where practicable, the maximum longitudinal slope shall be 5%.

An operation and maintenance plan is required.

Treatment volume shall be calculated as specified in Section 3 of the NCDENR Stormwater BMP manual.

Swales shall convey the design discharge while maintaining a 0.5-foot freeboard and without exceeding the maximum permissible velocity.

**Applicant's
Initials**

Stormwater Wetlands

Sizing shall take into account all runoff at ultimate build-out including off-site drainage.

Side slopes stabilized with vegetation shall be no steeper than 3:1.

Wetland shall be located in a recorded drainage easement with a recorded access easement to a public ROW.

_____ The wetland must draw down in 2-5 days.
_____ Flow through the wetland shall not be short-circuited. It shall be made as
_____ lengthy as possible.
_____ A forebay is required.
_____ Overflows shall pass through a minimum 30 feet long vegetative filter, 50-foot
_____ filter is required for some projects
_____ Wetlands require pretreatment.
_____ Sizing of wetland is based on storage volume requirements and shall be as
_____ described in the NCDENR Stormwater BMP manual section 9.
_____ The minimum treatment volume for a stormwater wetland shall be 3,630 ft³.
_____ Lesser volumes will be approved on a case-by-case basis.
_____ Maximum shallow land depth shall be 1 foot.
_____ Minimum length to width ratio shall be 1:5:1.
_____ The wetland must be stabilized within 14 days of construction.
_____ One of the following two criteria must be met, 1.) The deep pools shall be at
_____ least six inches below the seasonably low water table, or 2.) A clay liner shall
_____ be installed such that the minimum infiltration rate is 0.01 in/hr. Appropriate
_____ topsoil will be added to the clay liner to support plant growth.
_____ Cattails are not to be planted.



FOR OFFICE USE ONLY	
Date Received:	_____
Review Fee: \$	_____
Permit No:	_____
Date Issued:	_____

City of Jacksonville Annual Maintenance and Inspection Report

PROJECT INFORMATION

Project Name: _____
 Project Address: _____

OWNER INFORMATION

Property Owner: _____
 Property Owner Address: _____
 State: _____ Zip: _____ Property Owner Telephone: _____
 Fax: _____ Email Address: _____

APPLICANT INFORMATION (IF DIFFERENT FROM OWNER)

Permit Holder's Name (Specify the name of the corporation, individual etc): _____
 Permit Holder's Address: _____
 State: _____ Zip: _____ Telephone: _____
 Fax: _____ Email Address: _____

PERMIT INFORMATION

- Specify the type(s) of stormwater treatment:

<input type="checkbox"/> Constructed Wetland	<input type="checkbox"/> Bioretention	<input type="checkbox"/> Wet Detention Basin
<input type="checkbox"/> Dry Detention Basin	<input type="checkbox"/> Infiltration Basin	<input type="checkbox"/> Infiltration Trench
<input type="checkbox"/> Sand Filter	<input type="checkbox"/> Other:	

Recorded Book and Page of the lot for each structural BMP: Book _____ Page No. _____
- List any changes from project that was originally approved (attach additional pages if needed):

- Do you have a copy of the original Operation and Maintenance Agreement? (check one)
 - Yes (If yes, submit the attached Operations and Maintenance verification sheet.)
 - No (If no, then submit a new Operations and Maintenance Agreement signed, notarized and to be registered.)

SUBMITTAL REQUIREMENTS

1. Please indicate that you have provided the following required information by initialing in the space provided next to each item.

Initials

- **Original & 1 copy of the Annual Maintenance Inspection and Report**
- **Annual Maintenance Inspection and Report fee of \$250.00**
- **Operation & Maintenance Verification**
- **Retention Pond or other BMP Inspection Sheet(s)**

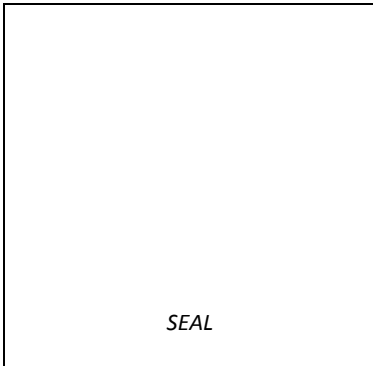
INSPECTOR'S CERTIFICATION

(Inspector shall be an engineer, surveyor, landscape architect, soil scientist, aquatic biologist or person certified by the North Carolina Cooperative Extension Service for stormwater treatment practice, inspection and maintenance

I, *(Print or type name of Inspector)* _____,

certify that an inspection was made on *(Date)* _____ and that all structural BMPs are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by the ordinance.

Inspector's Signature: _____ Date: _____



OPERATIONS AND MAINTENANCE VERIFICATION

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed in the original Operations and Maintenance Agreement. I agree to notify the City of Jacksonville of any problems with the system or prior to any changes to the system or responsible party.

Owners Name: _____

Title: _____

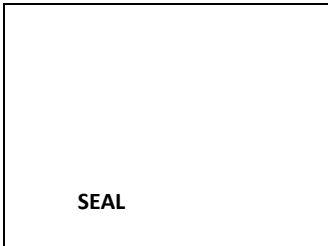
Signature: _____ Date: _____

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 forgoing stormwater BMP maintenance requirements. Witness my hand and official seal,

Notary Signature: _____



My commission expires: _____

Example Annual Maintenance Recommendations

Note: This example of annual maintenance recommendations is being provided by the City of Jacksonville for INFORMATION ONLY. Actual needs will vary based upon site conditions and type, size and capacity of the BMPs.

Task	Frequency	Notes
Remove sediment from Forebay and deep pool (dredging/dipping).	Varies. In stable watersheds, once Every 5-10 years is Typical.	In unstable watersheds (those with active construction), the frequency increases to once a year, assuming the forebay is correctly sized.
Monitor sediment depth in forebay and deep pools.	Once a year.	In a large pond or wetland, a small boat may be needed.
Maintain free-flowing orifice (drawdown hole).	Once per month and after after storm exceeding 2 inches.	Perform inspection regularly. Unclog the hole when needed.
Remove floating trash and debris	Depends on design aesthetics: once a week to once a month	Remove trash whenever the hole is being inspected. Inspect for trash more often if necessary and remove.
Remove vegetation from dam tops and faces.	Once a year.	Dam top and faces should consist of mowed grasses, if vegetated.
Remove invasive species (particularly Cattails).	In years 1 and 2, twice a year (spring and fall). From year 2 onward, once a year (spring).	If spread of cattails is somewhat limited, use the glyphosate-wipe method.
Mow the wet pond perimeter more.	Depends on design aesthetics. Ranges from every 1-3 weeks. Leave grass height about 3"-5".	Wet ponds that are a design amenity will require frequent mowing (1-3 weeks).
Remove muskrats and nutria.	Muskrat/nutria hole inspection and destruction should occur every time the wetland or wet pond is visited.	Contract a professional trapper to remove or use muskrat traps.

Example Retention Pond Inspection Sheet

Note:

This example inspection sheet is being provided by the City of Jacksonville for INFORMATION ONLY. Actual needs will vary based upon site conditions and type, size and capacity of the BMPs.

Date: _____ Time _____ Inspection Team: _____

Owner Name and Contact Information: _____

Address: _____

Watershed Land Uses:

Unknown Industrial Commercial Residential Other

Were photos taken? Yes _____ No _____

Vegetation Conditions: Diverse Monoculture Overgrown Invasive: (list) _____

Forebay Condition: No Forebay Good Sediments Overgrown

Forebay depth: _____ Sediments need to be removed? Yes ___ No ___

Berm Condition: Good Too Low Too High Un-vegetated Failing
 More than one Berm "Blow out in Berm"
 Berm Height Consistent With Design Plans? Yes ___ No ___ N/A ___

Overflow Area: Sized according to plans Yes No Absent

Inlet Condition: Normal Cracking Erosion Failing Overgrown

Outlet Condition: Normal Cracking Erosion Failing Overgrown

Drawdown Hole or Orifice Good Clogged Unclogged Can't find Broken

Aesthetics: Trash Debris Pests Mowed Spoils Other

Fence Conditions: Good Failing Over-vegetated Sinkholes

Comments: _____

Recommendations

Passed Inspection _____ Failed Inspection _____

Repairs Needed: _____

Table of Amendments

Section	Current Version	Amended Version	Effective Date
Table of contents	March 1, 2009	Addition of New State BMP Requirements, added new pages and changed material.	June 2009
Page 7	Fee schedule for stormwater permitting program.	Added an "off-site Permit" for \$1,000	April 21, 2009
Page 31	Not present	New Stormwater Submittal Requirements sheet	June 2009
Pages 41-51	Missing NCDENR State BMP Requirements for various types of BMPs.	Added new NCDENR BMP requirements for BMP's not previously listed.	June 2009
Pages 41-51	Old MSSD and NCDENR State BMP Requirements for various types of BMPs.	Changed or modified old MSSD BMP requirements to the new NCDENR BMP requirements.	June 2009
Pages 31-38	Off-Site Permit not present	Added new Off-Site Permit application and Permit	July 2009
Page 29	Submittal Requirements clarified	Added that certifications can be on 8½X11 sheet and permit needs to be signed and notarized	July 2009
Page 30	Stormwater Submittal Requirements	Added "Off-Site Permit" to line number 9 and changed page numbers accordingly	July 2009
Page 13 and Page 23	Section 6. Inspection deleted sample of inspection report	Added that a sample can be found within the Stormwater Administrative Manual	January 2010
Page 18 and 29	Clarified list of exhibits and deleted sample inspection report	Clarified Exhibit A and B	January 2010
Page 40	Numbering incorrect for Section 2 Conditions	Corrected Numbering of Section 2 Conditions	January 2010

Page 41 and 42	Numbering incorrect for Deed Restriction-Protective Covenant	Corrected Numbering for Deed Restriction-Protective Covenant	January 2010
Page 57	Not Present	Added Rainwater Harvesting Systems (Cisterns)	January 2010
Page 60	Not Present	Added Annual Maintenance and Inspection Report	January 2010
Page 64	Not Present	Added Table of City Attorney Interpretations	January 2010
Page 44	Not Present	Added Stormwater Permit Name/Ownership Change Form	February 2010

Table of Interpretations from City Attorney

Per the City of Jacksonville Ordinance #2009-07, "Phase II Stormwater Standards for the City of Jacksonville" (herein referred to as "Ordinance"), Section F.3 Authority for Interpretation, "the City Attorney or his or her designee has authority to determine the interpretation of this ordinance." Below is a summary table of interpretations and detailed interpretations are herein attached and incorporated by reference as if fully set out.

Section	Question	Answer	Effective Date
Section 5.B.1 of Ordinance #2009-07	Is the Operation and Maintenance Manual recorded after final plat approval?	No, the Operation and Maintenance Manual is recorded upon it's execution at the beginning of the permit application process with all required exhibits..	1/15/2010



Phase II Stormwater Ordinance Interpretation

Per the City of Jacksonville Ordinance #2009-07, "Phase II Stormwater Standards for the City of Jacksonville" (herein referred to as "Ordinance"), Section F.3 Authority for Interpretation, "the City Attorney or his or her designee has authority to determine the interpretation of this ordinance." The City Attorney, John T. Carter, Jr. has received a request from staff for an interpretation of said Ordinance as follows:

Question: Section 5.B.1. states that "the operation and maintenance agreement must be approved by the City Manger prior to plan approval, and it shall be referenced on the final plat and shall be recorded with the county Register of Deeds upon final plat approval." In addition Section 5.F.1. uses similar verbiage by stating that "every structural BMP shall be referenced on the final plat and shall be recorded with the county Register of Deeds upon final plat approval." The question asked is the Operation and Maintenance Manual recorded after final plat approval?

Answer: No, the Operation and Maintenance Manual is recorded upon it's execution at the beginning of the permit application process. AMEC Incorporated was hired by the City of Jacksonville to draft the Ordinance which was approved by the City Council. Mr. Carter contacted Mr. Keith Readling, AMEC Incorporated, on December 14, 2009 to inquire as to the intent of said passage in question. The intent was to execute and record the Operation and Maintenance Agreement before the issuance of a Stormwater Permit. At the conclusion of the construction of the Structural BMPs, the approved final plat shall reference the recorded Operation and Maintenance Agreement. Therefore, the following sentences within each respective Section are hereby interpreted as follows:

Section 5.B.1. "The operation and maintenance agreement must be approved by the City Manger prior to plan approval, and it shall be referenced on the final plat and *[the final plat]* shall be recorded with the county Register of Deeds upon final plat approval."

Section 5.F.1. "The applicable operations and maintenance agreement or dedication and acceptance into public maintenance (whichever is applicable) pertaining to every structural BMP shall be referenced on the final plat and *[the final plat]* shall be recorded with the county Register of Deeds upon final plat approval."

This 15th day of January, 2010.



John T. Carter, Jr.
City Attorney