CORPORATION OF HARPERS FERRY, WEST VIRGINIA

ORDINANCE No. 2015-01

An ORDINANCE to establish a new Article 1713 of the Codified Ordinances of Harpers Ferry, pertaining to stormwater management; establishing authority, purpose, and applicability; prescribing procedures and requirements; and establishing enforcement, penalties, and an appeal process.

[Introduced to Town Council by Planning Commission. Referred to Ordinance Review Committee. Legal review by Attorney Gregory Bailey.]

Be it enacted by the Town Council of the Corporation of Harpers Ferry:

That a new Article 1713 of the Codified Ordinances be enacted to read as follows:

ARTICLE 1713
Stormwater Management

1713.01 General provisions.

(a) Statutory authority.

(1) Short title. This ordinance, and ordinances supplemental or amendatory thereto, shall be known and may be cited as the "Stormwater Management Ordinance of the Corporation of Harpers Ferry, West Virginia" and hereinafter referred to as the "Ordinance".

(2) The provisions of this Ordinance are enacted pursuant to West Virginia Code:

A. Chapter 8, Municipal Corporations, Article 20, Combined Systems

B. Chapter 8A, Land Use Planning, Article 4, Subdivision and Land Disturbance Ordinance

C. Chapter 16, Public Health, Article 13, Sewage Works and Stormwater Works

D. Chapter 22, Environmental Resources, Article 11, Water Pollution Control Act

(b) Purpose and objectives.

This ordinance has the following purposes:

(1) Protect, maintain, and enhance the environment of the Corporation of Harpers Ferry and the public health, safety, and general welfare of the citizens of Harpers Ferry by controlling discharges of pollutants to the stormwater system, and maintain and improve the quality of the receiving waters into which all stormwater flows, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the community.

(2) Enable the Corporation of Harpers Ferry to comply with the West Virginia Department of Environmental Protection (DEP)-administered National Pollutant Discharge Elimination System (NPDES) stormwater permit program and applicable regulations (40 CFR, §122.26) for stormwater discharges.

(3) Enable the Corporation of Harpers Ferry to comply with the Environmental Protection Agency's (EPA's) Total Maximum Daily Loads (TMDLs) Water Quality Standards established for the Potomac River Basin.

(4) Enable the Corporation of Harpers Ferry to comply with the West Virginia Water Pollution Control Act, West Virginia Code, Chapter 22, Article 11.

(5) Allow the Corporation of Harpers Ferry to exercise the powers granted in West Virginia Code §8-12-5 and §8-20-1a, which provide, among other powers municipal corporations have with respect to stormwater systems and stormwater management programs, the power by ordinance or resolution, as the case may require, and by appropriate action based thereon to do the following:

A. Exercise general regulation over the planning, location, construction, operation, and maintenance of stormwater facilities in the Corporation of Harpers Ferry whether or not owned and operated by the Town;

B. Adopt any rules and regulations deemed necessary to accomplish the purposes of this Ordinance, including the adoption of a system of fees for services and permits;

C. Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;

D. Review and approve plans and plats for stormwater management in proposed residential and nonresidential subdivisions as applicable under Subsection (d) below;

E. Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;

F. Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;

G. Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and

H. Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(c) <u>Administering entity.</u>

(1) Pursuant to West Virginia Code §16-13-1, any municipal corporation and / or sanitary district in the State of West Virginia is hereby authorized and empowered to own, acquire, construct, equip, operate, and maintain within and / or without the corporate limits of such municipal corporation a stormwater system, stormwater works, and stormwater management program as

defined herein.

(2) The Corporation of Harpers Ferry is the entity responsible for administering the provisions of this Ordinance.

(d) Applicability.

(1) This Ordinance shall be applicable to all Land Disturbance Activities as defined herein. These standards apply to any new development or Redevelopment Parcel that meets one or more of the following criteria:

A. New development that involves the creation of 5,000 square feet or more of disturbance;

B. Redevelopment that includes the creation, addition, or replacement of 5,000 square feet or more of disturbance; or

C. Land Disturbance Activities that are smaller than the minimum applicability criteria set forth in items A and B above, if such activities are part of a larger common plan of development, even though multiple, separate, and distinct land disturbance activities may take place at different times on different schedules.

(2) Compatibility with other permits and ordinance requirements.

A. Compliance with the requirements herein does not create exclusion to permitting requirements from the West Virginia DEP, the U.S. Army Corps of Engineers, or any other agency or reviewing body that has jurisdiction over the proposed project area.

B. Whenever this Ordinance imposes a conflicting restriction regarding stormwater regulation, the provisions of the more restrictive ordinance shall control. Where, due to vagueness or lack of clarity in the language of this Ordinance, a reasonable doubt exists regarding the meaning of any restriction, said doubt shall be resolved in favor of the property owner.

(3) The following activities are exempt from this Ordinance:

A. Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.

B. The construction of one single-family residence, or additions or modifications to existing single-family residential structures. However:

1. The property owner is responsible for preventing soil accumulation on the road surface as a result of the construction, addition, or modification.

2. The property owner shall prevent sediment and runoff drainage from impacting neighboring properties as a result of the construction, addition, or modification.

3. The following agreement shall be submitted to the Corporation of Harpers Ferry: *"In lieu of submission of a Stormwater Management Plan for the construction of this single-family dwelling, I agree to comply with any reasonable requirements determined necessary by employees of the Corporation of Harpers Ferry in accordance with published Harpers Ferry Construction Standards and Guidelines. Such requirements shall be based on the conservation standards contained in the Town's Stormwater Management Ordinance and shall represent the minimum practices necessary to provide adequate control of erosion and sedimentation on or resulting from the project. I further understand that failure to comply with such requirements*

following notice by the representatives of the Town could result in a citation for violation of the Stormwater Ordinance."

C. Any logging or Agricultural Activity that is consistent with an approved farm conservation plan or a timber management plan prepared or approved by the Eastern Panhandle Conservation District.

D. Repairs to any Stormwater Management Facility.

(e) Severability. If any section, clause, sentence, part, or provision hereof shall be held to be invalid, or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, clauses, sentences, parts, or provisions of this Ordinance.

(f) Incorporation by reference.

(1) For the purposes of this Ordinance, the Corporation of Harpers Ferry has adopted by reference the following published standards:

A. *Virginia Stormwater Management Handbook*, volumes 1 and 2, 1st ed. (1999), or latest edition.

B. Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed", version 2.0 (June 2009).

C. Darrin Holmes and Ramesh Chintala, *West Virginia Division of Highways Drainage Manual, 3rd ed.* (Charleston, WV: West Virginia Department of Transportation, Division of Highways, Engineering Division, Hydraulic and Drainage Unit, December 2007), http://www.transportation.wv.gov/highways/engineering/Pages/publications.aspx.

(2) All Stormwater Management Plans shall be consistent with the regulations and design standards established in the listed published standards.

1713.02 Stormwater Management Program procedures and requirements.

(a) Land Disturbance Permit.

(1) Requirements.

A. Any entity proposing to perform any Land Disturbance Activity pursuant to the applicability standards outlined under Section 1713.01(d) of this Ordinance shall obtain from the Town a Land Disturbance Permit for that purpose.

B. Unless specified otherwise by this Ordinance, the Land Disturbance Permit Package shall include the following:

1. Concept Plan, when applicable;
2. Land Disturbance Permit application;
3. Review fees;
4. Stormwater Management Plan, in accordance with Section 1713.02(c) of this Ordinance; and
5. Maintenance requirements in accordance with Section 1713.02(d)(2)Q and the Inspection and Maintenance Agreement (Attachment B).

C. No Land Disturbance Permit application will be approved unless it includes a Stormwater Management Plan, as required by this Ordinance, detailing how Runoff and associated water quality impacts resulting from the activity will be controlled or managed.

D. No Land Disturbance Permit shall be issued until a satisfactory final Stormwater Management Plan, or a waiver thereof, shall have undergone a review and been approved by the Town after determining that the plan or waiver is

consistent with the requirements of this Ordinance.

E. No applicant shall receive a Land Disturbance Permit without first meeting the requirements of this Ordinance prior to commencing the proposed activity.

(2) Land Disturbance Permit application procedure.

A. The applicant must submit a Land Disturbance Permit Package, as specified in Section 1713.02(a)(1)B of this Ordinance.

B. Within 45 days of the receipt of a complete Land Disturbance Permit Package, including all documents as required by this Ordinance, the Town shall inform the applicant whether the application, plan, and maintenance agreement are approved or disapproved.

C. If the Land Disturbance Permit is denied, the Town shall communicate the decision to the applicant in writing. The applicant may then revise the Stormwater Management Plan. If additional information is submitted, the Town shall have 30 days from the date the additional information is received to inform the applicant that the plan is either approved or denied.

(3) If the Land Disturbance Permit application is approved by the Town, the following conditions apply:

A. The applicant shall comply with all applicable requirements of the approved plan and this Ordinance and shall certify that all land clearing, construction, land disturbance, and / or drainage will be done according to the approved plan.

B. The Land Disturbance Activity shall be conducted only within the area specified in the approved plan.

C. The Corporation of Harpers Ferry shall be allowed, after giving notice to the owner, occupier, or operator of the Land Disturbance Activity, to conduct periodic inspections of the project.

D. The person responsible for implementing the approved plan shall conduct monitoring and submit reports as the Town may require to ensure compliance with the approved plan and to determine whether the plan provides effective stormwater management.

E. No changes may be made to an approved plan without review and written approval by the Corporation of Harpers Ferry.

F. A certified inspection of all aspects of the BMP, including surface As-Built Surveys, and geotechnical inspections during subsurface or backfilling and compaction activities shall be required.

(b) Stormwater management concept plans.

(1) Prior to submission of any Stormwater Management Plan or Land Disturbance Permit application, the applicant may be required to submit a Stormwater Management Concept Plan based on the following options:

A. The Stormwater Management Concept Plan is *required* for all Major Site (Land Development) Plans.

B. The Stormwater Management Concept Plan is *recommended*, but not required, for Minor Site (Land Development) Plans.

(2) Prior to submitting the concept plan, the applicant may request a consultation meeting with the Town to discuss best management practices (BMP) and post-construction stormwater management. The Town shall review the concept plan at the regularly scheduled Planning Commission meeting. The Concept Plan must be submitted

two weeks prior to the scheduled Planning Commission meeting.

(3) Discussions, opinions, and / or representations made during the review of a Stormwater Management Concept Plan shall not be a basis for noncompliance with the applicable requirements for plan approval, and shall not be binding upon the Town when acting upon subsequently submitted Stormwater Management Plans.

(4) The Stormwater Management Concept Plan shall include at a minimum the following information:

A. Existing Conditions Plan and a Proposed Site Plan containing:

1. Contour lines at 2-foot or 10-foot intervals and any streams found on U.S. Geological Survey (USGS) topographic mapping;
2. Soils, Riparian buffer zones, Managed Turf and vegetative boundaries; and
3. Roads, buildings, parking areas, and other Impervious Cover.

B. Natural Features Plan(s), with existing and proposed features, including:

1. Floodplains, rock outcrops, Karst features, large trees (diameter at 4.5 feet >18”);
2. Natural drainage areas and wetlands;
3. Threatened and / or endangered species;
4. Any required setbacks (including existing septic areas, wells); and
5. Proposed Landscaping features.

C. Stormwater Management System Plan, containing:

1. Graphic illustration of the proposed Post-development stormwater facilities and / or nonstructural practices;
2. Conveyance system and flow paths;
3. Relationship to upstream and downstream properties and drainage;
4. Bridge and / or culvert crossings; and
5. Approximate location of stormwater inlets and outlets.

(c) Review and approval of Stormwater Management Plans.

(1) All applicants as noted in Section 1713.01(d) of this Ordinance shall submit a complete Stormwater Management Plan to the Town for review and approval. Each plan submittal shall include the minimum content specified in Section 1713.02(d) and meet the minimum stormwater design requirements contained in 1713.04 of this Ordinance.

(2) The Town shall perform a comprehensive review of the applicant’s Stormwater Management Plan. Coordinated comments will be provided for each plan phase that reflects input from all appropriate agencies including, but not limited to, the Eastern Panhandle Conservation District.

(d) Stormwater Management Plan requirements.

(1) All Stormwater Management Plans shall be appropriately sealed and signed by a Professional Engineer in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with West Virginia Code Chapter 30, Professions and Occupations, and attendant regulations certifying that the plan meets all submittal requirements outlined in this Ordinance and is consistent with good engineering practice. A Registered Landscape Architect’s signature shall be required when plans require landscaping as required in Subsection 1713.04(f) of

this ordinance.

(2) The Stormwater Management Plan shall include the following:

A. Name, address, and telephone number of all persons having a legal interest in the property;

B. Tax reference number and parcel number of the property or properties affected;

C. Existing and proposed buildings, roads, and parking areas within project boundary;

D. Existing and proposed drainage areas, including areas necessary to determine downstream analysis for proposed stormwater management facilities;

E. Existing and proposed utilities, easements, and structural stormwater management and sediment control facilities;

F. Proposed land use with tabulation of the percentage of surface area to be adapted to various uses;

G. Clearing and grading limit boundaries;

H. A 1" = 200' vicinity map of the Site, which extends a minimum of 200 feet beyond the limits of the proposed development;

I. Existing surface water drainage including streams, ponds, culverts, ditches, drainage patterns, and wetlands;

J. Current land use including all existing structures and significant natural and man-made features not otherwise shown;

K. A written or graphic inventory of the natural resources at the Site and surrounding area as it exists prior to the commencement of the project, and a description of the Watershed (Hydrologic Unit Code – 12) and its relation to the project Site;

L. Forest cover, wetlands, and other native vegetative areas on the Site;

M. Environmentally sensitive features (e.g., wetlands, 100-year floodplains, steep slopes, Karst Terrain, threatened and / or endangered species, etc.) that provide particular opportunities or constraints for development. (Note: All projects located within a floodplain as defined in the Harpers Ferry Floodplain Ordinance or latest version thereof shall meet the requirements therein. Compliance with this Stormwater Management Ordinance does not preclude compliance with the latest version of the Floodplain Ordinance.);

N. Hydrologic and hydraulic design calculations for the Pre-development and Post-development conditions for the Design Storms specified in this Ordinance. Such calculations shall include the following:

1. Description of the Design Storm Frequency, intensity, and duration;
2. Time of concentration;
3. Soil Curve Numbers (CNs) or Runoff Coefficients;
4. Peak Runoff rates and total Runoff volumes for each Watershed;
5. Infiltration rates, where applicable;
6. Culvert and / or channel capacities;
7. Flow velocities;
8. Data on the increase in rate and volume of Runoff for the specified Design Storms; and
9. Documentation of sources for all computation methods and field test results;

O. Sufficient engineering analysis to show that the proposed stormwater management measures are capable of controlling Runoff from the Site in compliance with this Ordinance (see Section 1713.04) and the specifications of the *Virginia Stormwater Management Handbook*;

P. Geotechnical properties for the hydrologic and structural properties of soils, especially for dam embankments, shall be described in a soils report. The submitted report shall include boring depth, sampling Frequency and types, and associated laboratory testing with results and conclusions, and follow the criteria in the *Virginia Stormwater Management Handbook*. Soil properties for Infiltration facilities shall also conform to the guidance and specification outlined in the *Virginia Stormwater Management Handbook;*

Q. Maintenance requirements:

1. The design and planning of all stormwater management facilities shall include detailed maintenance procedures to ensure their continued function. These maintenance plans will identify the parts or components of a Stormwater Management Facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.
2. The applicant must ensure access to all stormwater treatment facilities at the Site for the purpose of inspection and repair by securing all the maintenance easements needed on a permanent basis. These easements will be recorded with the plan and will remain in effect even with the transfer of title to the property.
3. Prior to the issuance of any Land Disturbance Permit that has a Stormwater Management Facility as one of the requirements of the permit, the applicant or owner of the Site must execute a maintenance easement agreement that shall be binding on all subsequent owners of land served by the Stormwater Management Facility.
4. All maintenance, inspections, and cleaning shall be the responsibility of the property owner. This shall be specified in the recorded maintenance agreement.
5. The Corporation of Harpers Ferry shall ensure that preventative maintenance is performed by requiring property owners to produce inspection reports on all stormwater management systems upon request. Inspections shall occur during the timeframes noted in Section 1713.06 of this Ordinance.
6. The Corporation of Harpers Ferry shall provide inspection report forms. (See Attachment D.);

R. The applicant must present a detailed Landscaping plan, as described in 1713.04(f);

S. All Land Disturbance Activities that adjoin a watercourse or portion thereof shall clearly depict upon a Site plan the proposed stream buffer or methods of preserving an existing natural stream buffer pursuant to

Section 1713.04(g) of this Ordinance;

T. Any applicant engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller Sites in a larger Common Plan of Development or sale, are required to obtain a West Virginia NPDES General Water Pollution Control Permit for their stormwater discharges. Construction Sites that result in land disturbance of one acre or greater will require the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) meeting the requirements of the General Permit;

U. The applicant shall provide verification to the Town that all other applicable environmental permits have been acquired for the Site prior to approval of the stormwater design plan; and

V. The applicant shall specify a sequence of construction and proposed inspection schedule.

(3) A non-refundable permit fee will be collected at the time the Land Disturbance Permit package (Section 1713.02[a][1]B) is submitted. The permit fee will provide for the cost of plan review, administration, and management of the permitting process and inspection. A permit fee schedule shall be established by the Town based upon the complexity of the inspection and may be amended from time to time.

1713.03 Waivers and modifications of requirements.

(a) General.

(1) This Section is intended to provide a procedure to achieve the water quality and quantity objectives of this Ordinance while providing reasonable flexibility for difficult Site conditions and innovative Site design approaches.

(2) The provisions of this Ordinance are the minimum requirements for the protection of the public's health, safety, and welfare, and should be strictly adhered to. Written requests for waivers to or modifications of these requirements should be granted only where the requirement of strict adherence would be unreasonable, cause undue hardship, or an alternative standard can be demonstrated to provide equal or better results.

(b) Request for waiver or modification.

(1) Every applicant defined under Section 1713.01(d) of this Ordinance shall submit a Stormwater Management Plan unless a written request for a waiver seeking relief from the stormwater management standards of this Ordinance is filed with the Corporation of Harpers Ferry and such request is granted.

(2) If the applicant demonstrates to the satisfaction of the Town that any stormwater management requirements of this Ordinance are unreasonable or cause undue hardship as it applies to the proposed Land Disturbance Activity / Activities, the Town may grant relief to such standards provided that such relief meets the findings specified under Section 1713.03(b)(4).

(3) The applicant shall submit all requests for waivers in writing to the Town and shall include such requests as a part of the Stormwater Management Plan review and approval process as defined under Section 1713.02(c) of this Ordinance. The applicant shall state in full the facts of unreasonableness or hardship on which the request is based, the provision or provisions of the Ordinance that are involved, and the minimum waiver or relief that is necessary. The applicant shall state how the requested waiver and how the applicant's proposal shall result in an equal

or better means of complying with the water quality and quantity objectives and requirements of this Ordinance.

(4) The Town may grant waivers or a modification of requirements when the following findings are made, as relevant:

A. The waiver will not create an adverse impact to water quality and water quantity.

B. The waiver is the minimum necessary to provide relief.

C. The applicant is *not* requesting a waiver based on cost considerations.

D. Existing off-site stormwater problems will not be exacerbated.

E. Runoff is not being diverted to a different drainage area.

F. Increased flooding or ponding on off-site properties or roadways will not occur.

G. Potential icing conditions will not occur.

H. Increase of peak flow or volume from the Site will not occur.

I. Erosive conditions due to increased peak flows or volume will not occur.

J. Increased 100-year floodplain levels will not result.

K. Increased or unusual municipal maintenance expenses will not result from the waiver.

L. The amount of stormwater generated has been minimized to the greatest extent allowed.

M. Infiltration of Runoff throughout the proposed Site has been provided where practicable, and Pre-development groundwater recharge protected at a minimum.

N. Peak flow attenuation of Runoff has been provided.

O. Long-term operation and maintenance activities are established.

P. The immediate downstream waterways will not be subject to each of the following criterion:

1. Deterioration of existing culverts, bridges, dams, and other structures;
2. Deterioration of biological functions or habitat;
3. Accelerated streambank or streambed Erosion or siltation;
4. Increased threat of flood damage to public health, life, and property.

(c) Process for waiver or modification.

(1) An application for a waiver shall be filed with the Town. An application for the waiver shall be submitted, along with the required fee, on the appropriate form. In addition to that basic information, the following information shall be submitted to support the application:

A. Plat or plan of the property depicting parcel information, proposed layout, and, where applicable, all proposed modifications;

B. A description of the physical features of the property, total acreage, present use, the use of the property at the time of the adoption of these Regulations, and any known prior uses;

C. A description of the specific portions of these Regulations for which relief is being sought;

D. A narrative describing how the proposed waiver will improve the public benefits; and

E. An accurate list of all properties and owners' addresses adjoining the subject property.

(2) The applicant shall post the property fourteen days prior to the scheduled meeting.
(3) The Town shall make a decision within 30 days of the receipt of the request for waiver.
(4) In granting a waiver, the Town may prescribe any conditions and safeguards that it finds are appropriate and in conformity with these Regulations.
(5) All waivers and / or conditions of approval associated with the waiver shall be documented on all subsequent plats or plans.

1713.04 Stormwater management design criteria.

(a) Reference to the Design Manual.
(1) The Corporation of Harpers Ferry shall use the technical specifications and standards in the *Virginia Stormwater Management Handbook* as the tool for making decisions about stormwater permits and about the design, implementation, and performance of structural and nonstructural stormwater BMPs.
(2) The *Virginia Stormwater Management Handbook* includes a list of stormwater treatment practices, including the specific design criteria for each stormwater practice. Stormwater treatment practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards. If the specifications or guidelines found therein are more restrictive than other requirements, that shall not prevent application of the specifications or guidelines in the *Virginia Stormwater Management Handbook*.

(b) General performance criteria.
(1) Low-Impact Development (LID) is a stormwater management method that is modeled after nature. LID is unique to each site and uses both structural and nonstructural practices to control runoff close to where it falls. LID is recommended as the standard stormwater management practice.
A. The use of LID and BMPs in conjunction with traditional stormwater management shall control stormwater Runoff at the source and more closely approximate Pre-development Runoff conditions.
B. Karst Terrain considerations.
1. Developers and designers shall minimize the amount of Impervious Cover created at the Site to reduce the volume and velocity of increased stormwater Runoff.
2. Developers and designers shall place a high priority on preserving as much of the length of natural Karst swales present on the Site to increase Infiltration and accommodate flows from major storm events.
3. Developers and designers should consider small-scale LID practices as prescribed in the latest version of the Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed".
4. If a sinkhole exists in the pond or if stormwater from the pond discharges into a sinkhole, an Underground Injection Control Permit may be required from DEP. The Town requires copies the Preliminary Site Investigation (as required in Section 1713.04[e] of this Ordinance) and any correspondence with DEP.
C. LID stormwater management design plans developed consistent with the requirements of this subsection shall satisfy the

water quality and quantity performance criteria of this Ordinance.

D. The design criteria, hydrologic analysis, and computational procedures for BMPs noted in LID stormwater management design plans shall be those of the latest edition of the *Virginia Stormwater Management Handbook*.

E. LID stormwater management design plans shall not conflict with existing state or Town laws, ordinances, regulations, or policies.

F. Storm drainage easements shall be recorded to identify the locations of Best Management Practices on proposed project site. The property owner shall not remove or structurally alter integrated management practices without prior written approval from the Town.

G. Stormwater Runoff from parking lots shall utilize stormwater management Infiltration facilities and / or stormwater management filtering systems. These shall be placed within or near the parking lot islands.

1. Stormwater from parking lots may be infiltrated into the groundwater, provided that they are not considered a Class V well according to the Environmental Protection Agency, Office of Water "Class V Well Identification Guide" found at the Department of Environmental Protection's website.
2. If the BMP is considered a Class V well, the appropriate DEP Permits shall be required.
3. Documentation of the necessary permits shall be provided to the Town.

(2) All applicants shall design stormwater control facilities to achieve Post-development hydrologic conditions that are consistent with Pre-development conditions. The applicant shall improve Runoff conditions for Redevelopment projects.

(3) The Site shall maintain, as closely as possible, the Pre-development Infiltration processes and rates by implementing Infiltration close to the source of Runoff.

(4) Stormwater shall be treated to reduce pollutants during conveyance and collection.

(5) Peak Discharges from project shall be attenuated to prevent high Runoff rates and subsequent flooding of the receiving stream.

(6) Site design should implement Runoff reduction techniques to reduce the amount of stormwater that must be collected, conveyed, and treated by stormwater management facilities.

(c) <u>Stormwater quality criteria.</u>

(1) Stormwater quality treatment is required for all discharges. If stormwater quantity control does not provide for stormwater quality control, then a BMP shall be utilized prior to the Runoff entering the stormwater quantity control facility.

(2) Stormwater quality control facilities shall reduce solids, sediment, nutrients, and other pollutants from the stormwater. This shall be presumed to occur when each of the following criteria is met:

A. The facility is sized to capture the prescribed volume of water;

B. The facility is designed per the requirements and engineering calculations in the latest edition of the *Virginia Stormwater Management Handbook*;

C. The facility is constructed in accordance with all applicable plans and permits;

D. The facility is maintained per an approved Operations and Maintenance Agreement; and

E. A formula established by the West Virginia DEP shall be utilized to determine if water quality standards are satisfied. The formula can be found at the West Virginia DEP website.

(3) Infiltration of Runoff shall be as close to the source of Runoff as possible via Infiltration testing and analysis of Infiltration rates. Preference shall be given to a combination of surface and subsurface Infiltration measures.

(4) Site design shall minimize disturbance. All grading should be designed to distribute Runoff evenly. Areas of depression should be designed for subsurface Infiltration techniques.

(5) Stormwater discharges from land uses or activities with a high potential for pollutant loadings (Stormwater Hotspots) require the use of specific filtering or Bioretention BMPs prior to Infiltration. Stormwater control from these hotspots shall be controlled by the following:

A. Stormwater Pollution and Prevention Plan (SWPPP) required. In addition to a Stormwater Management Plan as required in Section 1713.02(a)(2), a SWPPP shall also be required. The SWPPP outlines pollution prevention and treatment practices that will be implemented to minimize polluted discharges from the Site. All SWPPPs shall be prepared following the guidelines in the West Virginia National Pollution Discharge Elimination System (NPDES) General Permit regulations even if an NPDES permit is not required.

B. Restricted Infiltration. A minimum of 50% of the total water runoff generated must be treated by a filtering or Bioretention practice prior to any Infiltration. Portions of the Site that are not associated with the hotspot generating area should be diverted away and treated by an acceptable stormwater BMP.

C. Infiltration Prohibited. In these cases, an alternative stormwater practice such as closed Bioretention, Sand Filters, or constructed wetland must be used to filter the entire water volume before it reaches surface or groundwater.

(6) Natural wetlands shall not be used to meet minimum requirements. When used as the end of an outfall pipe, the velocity shall not create Erosion.

(7) For all new development activities, each of the following regulations shall apply:

A. Stormwater management practices that provide or encourage Infiltration shall be considered first and foremost in all Site designs.

B. Stormwater quality management practices shall be designed to capture and treat the first one inch of stormwater runoff from the Impervious Cover and Managed Turf of development.

C. Stormwater quality may be achieved with or as part of Infiltration practices.

D. Stormwater quality improvement shall be provided for on-site drainage areas not otherwise addressed by Infiltration practices.

E. Stormwater shall be infiltrated and / or discharged within the same drainage area of the stream receiving the Runoff prior to development.

(8) Infiltration methods should be designed to infiltrate all of the stored volume within 48 hours of the storm event.

(9) All inflows to an Infiltration area shall be treated to prevent the discharge of sediment into the infiltration practice.

(10) During Site construction, the Infiltration area shall be protected from compaction, storage of fill, or construction materials.

(11) For Redevelopment activities, water quality improvements shall be provided for drainage areas not otherwise addressed by Infiltration practices either at the source of Runoff and / or during conveyance away from the source of Runoff. Stormwater quality management shall be designed to capture and treat the first one inch of stormwater runoff from the Impervious Cover and Managed Turf of development.

(12) When a porous pavement surface is installed on private lots, property owners shall be educated on their routine maintenance needs and understand the long-term maintenance plan. This shall be accomplished by a deed restriction or other mechanism enforceable by the Town to help ensure that the pervious paver system is maintained and functioning. The deed restriction or mechanism shall contain maintenance responsibilities and needs. It shall grant authority for the Town to access the property for inspection or corrective action. A note with regard to the deed restriction shall also be placed on the approved plans and in the required maintenance agreement.

(d) Stormwater quantity criteria.

(1) Figures for determining the rainfall amounts for Design Storms shall be obtained from the latest edition of the *West Virginia Division of Highways Drainage Manual* available from the West Virginia Department of Transportation website.

(2) Wooded sites shall use a ground cover of woodland in good condition. Portions of a Site having more than one viable tree of a Diameter at Breast Height (DBH) of six inches per 1,500 square feet shall be considered wooded where such trees existed within three years of application.

(3) The applicant must demonstrate that adequate downstream conveyance facilities are present.

(4) The applicant shall grant access, via a stormwater management easement, for on-site inspection, operation, and maintenance.

(5) Runoff calculations should be determined using one of the methods outlined in the latest version of the *Virginia Stormwater Management Handbook*. The applicant should include justification of the method selected.

(6) For all new Land Development projects, the Post-development Peak Discharge rate shall not exceed the Pre-development peak rate for the 1-year, 2-year, 10-year, 25-year, 50-year, and 100-year storm events.

A. Where these Runoff volume requirements cannot be met, the applicant may file for a modification of stormwater requirements, provided that the following can be obtained:

1. The applicant must prove to the Town that the requirements in Section 1713.04(d)(6) cannot be met.
2. The Post-development Peak Discharge rate shall not exceed the Pre-development peak rate for the 2-year and 10-year storm events.
3. For events greater than the 10-year event, the Post-development rate shall not exceed 110% of the Peak Discharge rate given Pre-development cover.

B. Facilities capable of attenuating the required Runoff shall be designed to attenuate the 1-year, 24-hour storm event and release it over a minimum period of 24 hours. The release rate will be based on the minimum period of 24 hours. The release rate will be based on the receiving stream's ability to contain the discharge within the existing stream banks.

(7) Infiltration areas shall be designed to achieve broad and even Infiltration patterns similar to what existed in Pre-development conditions.

(8) Above-ground Infiltration facilities shall be as shallow as possible while still complying with this Ordinance.

(9) Water quality improvements shall be achieved in conjunction with or as part of Infiltration design.

(10) If a stormwater basin is being utilized to achieve stormwater attenuation, BMP practices for stormwater quality shall be considered in the design of the basin.

(11) Site hydrology and natural Infiltration patterns shall guide Site design, construction, and vegetation decisions.

(12) Structural and nonstructural stormwater management practices that promote or otherwise make best possible use of on-site Infiltration shall be considered first.

(13) Infiltration into Karst Terrain is encouraged only when it is determined that the possibility for subsidence and sinkholes is minimal. Concentrated flows or points of discharge are discouraged in these areas (refer to Section 1713.04[e]).

(14) For Redevelopment activities, one of the following standards shall be accomplished. Selection of these performance standards shall be determined by the Town, based on suitability as determined and documented by the Town:

A. Reduce Impervious Cover by at least 20% based on a comparison of existing Impervious Cover to proposed Impervious Cover.

B. Achieve a 10% reduction in volume of Runoff discharged by a 2-year storm event. Runoff calculations shall be based on a comparison of existing to proposed Site conditions.

C. Reduce Post-development Peak Discharge rates to 90% of the Pre-development rates for the 1-year, 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year, 24-hour storm events based on a comparison of existing ground cover to Post-development Site conditions.

(15) Land Disturbance Activities that can discharge directly to a main channel, major tributary or tributaries, or indirectly to the main channel through an existing stormwater drainage system (i.e., storm sewer, or tributary or stream valley) may do so without controlling the Post-development peak rate of Runoff, provided that:

A. The site shall comply with the Infiltration criteria and the water quality criteria established in this Ordinance, and one of the following:

1. If the Post-development Runoff is intended to be conveyed by an existing stormwater drainage system to the main channel, assurance must be provided that such system has adequate capacity to convey the flows created by the 100-year storm event during Post-development conditions within its banks.

2. The conveyance facility will be provided with improvements to furnish the required capacity to

convey the flows created by the 100-year storm event during Post-development conditions within its banks.

B. An evaluation of the impact to the stream shall be completed. The following information shall be included in the evaluation:

1. Hydrologic and hydraulic calculations for Pre-development and Post-development conditions that are necessary to determine the impact of hydrograph timing modifications due to the proposed development upon any dam, highway, structure, natural point of restricted flow, or any stream channel section shall be established with the concurrence of the Town.
2. The evaluation shall continue downstream until the increase in flow diminishes due to additional flow from tributaries and / or stream attenuation.

C. Any natural or man-made channel or swale must be able to convey the increased Runoff associated with the 100-year storm event within the banks.

D. Any natural or man-made channels or swale must be able to convey the increased 25-year storm event without creating any hazards to persons or property.

E. Any culvert, bridge, storm sewer, or any other facility that is designed to pass or convey flows from the tributary area must demonstrate the ability to pass the Post-development 25-year storm event.

(e) Soil studies and Karst Terrain requirements.

(1) Soil Infiltration testing shall be performed to determine the rate at which stormwater will permeate into the ground, thus preventing increased stormwater Runoff.

(2) Prior to soil Infiltration testing, a soil evaluation shall be completed to determine where the Infiltration testing should take place. Soil evaluations should be performed by a Professional Engineer.

(3) At a minimum, the soil evaluation shall address soil types, soil permeability, depth to bedrock, limitations of soils, presence / absence of Karst Terrain susceptibility to subsidence and / or sinkhole formation, and subgrade stability. This testing should be completed during the preliminary design stage.

(4) Soil Infiltration testing shall be completed for all developments or Redevelopments that are proposing to utilize Infiltration methods for stormwater management.

A. Soil Infiltration testing shall be performed at the same depth as the bottom of the proposed Infiltration area.

B. The location and method of soil Infiltration testing should be determined using percolation test techniques described in West Virginia Title 64, Bureau for Public Health Series 47, Sewage Treatment and Collection System Design Standards.

(5) In regions underlain by Karst Terrain, a preliminary Site investigation regarding Site-specific conditions shall be completed. If necessary, the investigation shall be followed by a detailed Site investigation.

A. The preliminary Site investigation(s) shall be completed as noted in the latest version of the Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed".

B. All necessary investigations as noted in the above-

referenced bulletin shall be completed by a qualified Professional Engineer, licensed by the State of West Virginia and experienced in working in Karst Terrain.

(f) Landscaping.

(1) The applicant must present a detailed Landscaping plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater facilities. The Landscaping plan must also describe who will be responsible for the maintenance of vegetation at the Site and what practices will be employed to ensure that adequate vegetative cover is preserved. This plan must be prepared by a Landscape Architect or other qualified individual familiar with the selection of emergent and upland vegetation appropriate for the selected BMP.

(2) Landscaping shall be required in and around all constructed stormwater management practices with a minimum surface area of 1,000 square feet.

(3) No woody plants shall be planted within the saturated zone or on a berm constructed for impounded water.

(g) Riparian buffers. Any property that adjoins a watercourse or portion thereof shall provide a stream buffer with the following standards. The stream buffer requirements shall include two zones. These stream buffer requirements are to be established and protected, as defined below:

(1) Zone 1: A 30-foot setback zone, measured from the top of the bank of the watercourse, where no disturbance of vegetation and soil except for restoration shall occur.

(2) Zone 2: A managed buffer zone, extending a distance equal to 40 feet outward from Zone 1 or to the 100-year floodplain boundary, whichever is larger, where disturbance of natural vegetative cover shall be limited to any of the following activities:

A. Corridor crossings for farm vehicles and livestock;

B. Public roads and improvements;

C. Corridor crossings for roads and railroads;

D. Public utility crossings, including, but not limited to, sewer, water, and electric;

E. Passive recreation uses;

F. Stream bank improvement projects; or

G. Any activity, as approved by the Town, which will minimally disrupt existing tree cover and soil mantle in order to maximize filtering and overall physical removal of particulate-form pollutants from stormwater Runoff.

1713.05 Construction inspection.

(a) Performance bond.

(1) The Corporation of Harpers Ferry shall require from the developer a surety, irrevocable letter of credit, or other means of security acceptable to the Town prior to the issuance of any permits for the construction of a development requiring a Stormwater Management and / or Erosion and Sediment Control Plan.

(2) The amount of the security shall not be less than the total estimated construction cost of the required items covered in this Ordinance, plus a 15% contingency factor to cover administrative and engineering costs in the event of default and potential damage to existing roads or utilities.

A. The amount of security shall be based upon the current market rates plus labor rates for installation. The total estimated construction cost should be reviewed, signed, and

sealed by a Licensed Professional Engineer prior to submission to the Town.

B. The amount of security based on the current market rates plus labor rates for installation shall be reviewed and approved by the Town or agents thereof prior to approval of the performance bond.

(3) The bond required in this section shall include provisions relative to the forfeiture for failure to complete work specified in the approved plans, permits, compliance with the provisions of this Ordinance, and other applicable laws and regulations, and any time limitations.

(4) The bond shall not be fully released without each of the following:

A. A final inspection of the completed work by the Town or agents thereof; and

B. Submission of "As-Built" plans and certification of completion by the Town that the Stormwater Management Plan and facilities comply with the requirements of the approved plan and the provisions of this Ordinance.

(b) Inspections during construction.

(1) Periodic inspections of the stormwater management facilities during construction shall be conducted by the Town or agents thereof. Construction inspections shall utilize the approved Stormwater Management Plan to establish whether the applicant is in compliance.

(2) All inspections shall be documented by a written report prepared by the Town or agents thereof and include each of the following:

A. The date of the inspection;

B. The project location;

C. A statement regarding compliance with the approved stormwater plan;

D. Documentation of any variations from the approved stormwater plan; and

E. Any other variations or violations regarding the on-site conditions as compared to the approved stormwater plan.

(3) The applicant shall be notified in writing of any violations and the required corrective actions.

(4) Additional work shall not proceed until the Town or agents thereof inspect and approve all the facilities in violation. The applicant shall be notified in writing of the inspection and any outstanding violations.

(5) For enforcement purposes, the Corporation of Harpers Ferry may utilize any combination of the following:

A. A notice of violation that specifies the need for correction may be used.

B. A stop-work order may be issued by the Town.

C. The bonds or securities may be held or the case can be referred for legal action if reasonable efforts to correct the violation have not been attempted.

D. A civil action or criminal prosecution may be brought against any person in violation of this Ordinance.

(c) Post-construction final inspection and As-Built plans.

(1) Upon completion of a project, and before a final inspection certificate is issued, the applicant is required to certify that the completed project is in accordance with the approved Stormwater Management Plan.

(2) All applicants shall submit actual "As-Built" plans. The plans shall include final design specifications for all stormwater

facilities and must be certified by a Professional Engineer or a Professional Land Surveyor, and a certification letter from a design Professional Engineer for all stormwater management facilities or practices after final construction is completed.

A. The applicant shall submit two copies of the As-Built plans and the certification letter to the Town. The plans shall be prepared and signed by a Professional Engineer or a Professional Land Surveyor.

B. The As-Built plans and certification letter shall accompany the request for bond release in accordance with Section 1713.05(a) of this Ordinance.

C. The required certification letter must state that the conditions on the Site and the As-Built plan are identical to the facilities shown on the final approved Stormwater Management Plan. The certification letter should be completed, signed, and stamped by the design Professional Engineer.

1. Changes made during the construction process will not be permitted without prior written approval from the Town or agents thereof.
2. At a minimum, all As-Built plans and certification letters shall include a red-lined set of drawings that compare the approved Stormwater Management Plan with what was constructed. Final acceptance and approval will not be given until all final inspections and As-Built plans have been approved.

D. The following items shall be surveyed to determine actual field conditions, and the approved Stormwater Management Plans as annotated to reflect such actual field conditions shall constitute the As-Built plans.

1. The location, material, and size of all piping and all manholes, inlets, cleanouts, and points of connection to the existing system shall be referenced in two perpendicular directions.
2. The location of mains located within the public right-of-way shall be surveyed.
3. Horizontal dimensions shall be to the nearest tenth of a foot, and vertical dimensions shall be to the nearest hundredth of a foot.
4. Runs of storm sewers shall be identified.
5. Elevations shall be given for the rim of the top of all manhole covers, inlets, and catch basins, and all manhole, inlet, and catch basin inverts.
6. Elevations shall be given for all outlet structures.
7. Storm drain, manhole, inlet, and catch basin types shall be identified.
8. All infiltration and runoff reduction facilities including nonstructural practices.
9. Volume of all facilities.
10. LID details and structures.

(3) The Town shall perform a final inspection prior to the release of any performance bonds or securities.

1713.06 Post-construction maintenance, inspection and repair of stormwater facilities.

(a) Inspection and Maintenance Agreement.

(1) Prior to the approval of any Land Disturbance Activity for which stormwater management is required, the Corporation of Harpers

Ferry shall require the applicant or owner to execute an Inspection and Maintenance Agreement (see Attachment B) binding on all subsequent owners of land served by a private Stormwater Management Facility. Such agreement shall provide for access to the facility at reasonable times for regularly-scheduled inspections by the Town or the authorized representative to ensure that the facility is maintained in proper working condition to meet design standards.

(2) The agreement shall be recorded by the applicant and / or owner in the land records of the Office of the Clerk of Jefferson County and the Office of the Recorder of the Corporation of Harpers Ferry as required.

(3) The agreement shall also provide that, if after notice by the Town to correct a violation found during inspection or requiring maintenance work, satisfactory corrections are not made by the owner(s) within a period of 90 days or as agreed to by the Town, the Town may perform all necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties. This may be accomplished by placing a lien on the property.

(4) The Inspection and Maintenance Agreement shall be reviewed and approved by the Town prior to approval of the Land Development Plan.

(b) Inspection and maintenance of stormwater facilities.

(1) The party responsible for the maintenance of stormwater management facilities constructed pursuant to this Ordinance shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, Erosion and sediment control measures, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.

(2) A maintenance schedule shall be developed for the life of any Stormwater Management Facility. This maintenance schedule shall be printed on the approved Stormwater Management Plan. All stormwater maintenance schedules must be incorporated by the applicant and / or owner and included on the deed, Inspection and Maintenance Agreement, plans, offer of sale of real property, and purchase agreement.

(3) The party responsible for the maintenance of the stormwater management system shall provide written records of all maintenance and repairs to the Town.

(4) The Town shall ensure that preventative maintenance is performed by requiring property owners to produce inspection reports on all stormwater management systems upon request. Inspection shall occur at the following times:

A. The first year of operation;

B. A minimum of at least one time every three years after the first year of operation;

C. After a 2-year, 24-hour storm event; and

D. Based upon complaints or other notice of possible violations.

(5) Inspection Report requirements.

A. Inspection Reports shall be written and maintained by the Town for all stormwater management systems.

B. A copy of the Inspection Report shall be provided to the party responsible for the maintenance of the stormwater management.

C. Inspection Reports for stormwater management systems shall

include the following:
1. Date of inspection;
2. Location and address of facility;
3. Name of inspector;
4. Condition of the following:
   i. Vegetation or filter media;
   ii. Fences or other safety devices;
   iii. Spillways, valves, or other control structures;
   iv. Embankments, slopes, and safety benches;
   v. Reservoir or treatment areas;
   vi. Inlet and outlet channels or structures;
   vii. Underground drainage;
   viii. Sediment and debris accumulation in storage and forebay areas;
   ix. Any nonstructural practices to the extent practicable;
   x. Any other item that could affect the proper function of the stormwater management system.

1713.07 Enforcement and penalties.

(a) General procedures. Any failure to comply with the requirements of this Ordinance or the requirements of an approved Stormwater Management Plan or permit may be subject to the enforcement actions outlined in this section. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

(b) Violations.
   (1) When a person or persons has failed to comply with the terms and conditions of a permit, an approved Stormwater Management Plan, or the provisions of this Ordinance, the Corporation of Harpers Ferry shall issue a written notice of violation to the applicant or responsible party.
   (2) When a person or persons is engaged in an activity covered by this Ordinance without having a secured permit for such, a notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the Site.
   (3) A Notice of Violation shall contain the following information:
      A. The name and address of the landowner or the person responsible for the activity;
      B. The physical address and location of the activity and a description of the activity;
      C. A statement that explains the violation;
      D. A written statement explaining how to bring the action or inaction into compliance with the permit, Stormwater Management Plan, or the Ordinance, and the deadline for compliance;
      E. Penalty or penalties that may be assessed; and
      F. A statement that the determination of violation may be appealed to the Corporation of Harpers Ferry within 30 days of the Notice of Violation.

(c) Stop-work orders.
   (1) The Town may issue a stop-work order that shall be served on the applicant or other responsible person.
   (2) The stop-work order shall remain in effect until one of the following occurs:
      A. The applicant or other responsible person has taken the remedial measures set forth in the notice of violation.

B. The applicant has otherwise cured the violation or violations described therein.

(3) The stop-work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.

(d) Disapproval of subsequent permits. As long as a violation of this Ordinance continues and remains uncorrected, the Corporation of Harpers Ferry may withhold or disapprove any request for permit or development approval or authorization required by this Ordinance, the Zoning Ordinance, the Subdivision and Land Development Ordinance, or a building regulation for the land on which the violation occurs.

(e) Holds on final inspection certificates. The Corporation of Harpers Ferry may refuse to issue a final inspection for the building or other improvements constructed or being constructed on the Site and served by the stormwater practices in question until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

(f) Suspension, revocation, or modification of permit. The Corporation of Harpers Ferry may suspend, revoke, or modify the permit authorizing the Land Development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(g) Civil and criminal penalties.

(1) In the event the applicant or other responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to cure the violations described therein within 10 days, or such greater period as the Corporation of Harpers Ferry shall deem appropriate after the Town has taken one or more of the actions described in Article 1713.07(d)-(f), the Town may impose a penalty not to exceed $500.00 (depending on the severity of the violation) for each day the violation remains after receipt of the notice of violation.

(2) For intentional and flagrant violations of this Ordinance, the Town may issue a citation to the applicant or other responsible person, requiring such person to appear in court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed $500.00. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(h) Procedures.

(1) When a violation of this Ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint shall state fully the alleged violation and the basis thereof, and shall be filed with the Town, which shall record the complaint. The Town shall investigate the complaint.

(2) The Corporation of Harpers Ferry shall have the authority, upon presentation of proper credentials, to enter and inspect any land, building, structure, or premises to ensure compliance with this Ordinance.

1713.08 Appeals.

An appeal of a decision of the Corporation of Harpers Ferry regarding subdivision or site development decisions shall be taken directly to the Circuit Court of Jefferson County pursuant to West Virginia Code §8A-5-10 and

§8A-9-1, *et seq*.

1713.09 Definitions.
For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

(a) Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
(b) The words "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
(c) The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.
(d) Words defined herein may be listed in a separate ordinance by a different definition. If this occurs, then the word shall be used and interpreted within each code in accordance with the specific definition contained therein.

Agricultural Activity — The occupation, business, or science of cultivating the land, producing crops, and raising livestock.

As-Built — Drawing or certification of conditions as they were actually constructed.

Best Management Practice (BMP) — Structural or nonstructural practice that is designed to minimize the impacts of changes in land use on surface and groundwater systems. Structural BMP refers to basins or facilities engineered for the purpose of reducing the pollutant load in stormwater Runoff, such as Bioretention, Constructed Stormwater Wetlands, etc. Nonstructural BMP refers to land use or development practices that are determined to be effective in minimizing the impact on receiving stream systems, such as preservation of open space and Stream Buffers, disconnection of impervious surfaces, etc. Also known as Integrated Management Practices (IMP).

Bioretention Basin — Water quality BMP engineered to filter the water quality volume through an engineered planting bed, consisting of a vegetated surface layer (vegetation, mulch, ground cover), planting soil, and sand bed (optional), and into the in-situ material; also called rain gardens.

Common Plan of Development — A contiguous construction project where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan. The "plan" is broadly defined as any announcement or piece of documentation or physical demarcation indicating construction activities may occur on a specific plot; included in this definition are most subdivisions.

Constructed Stormwater Wetlands — Areas intentionally designed and created to emulate the water quality improvement function of wetlands for the primary purpose of removing pollutants from stormwater.

Curve Number (CN) — A numerical representation of a given area's hydrologic soil group, plant cover, Impervious Cover, interception and surface storage derived in accordance with Natural Resource Conservation Service methods. This number is used to convert rainfall depth into Runoff volume. Sometimes referred to as a Runoff CN.

Design Storm — A selected rainfall Hyetograph of specified amount, intensity, duration, and Frequency that is used as a basis for design.

Detention — The temporary impoundment or holding of stormwater Runoff.

Detention Basin — A Stormwater Management Facility that temporarily impounds Runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system. While a certain amount of outflow may also occur via Infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and therefore are not considered in the facility's design. Since an extended Detention Basin impounds Runoff only temporarily, it is normally dry during non-rainfall periods.

Development — See "Land Development".

Diameter at Breast Height (DBH) — The standard method of expressing the diameter of the trunk of a standing tree.

EPA — U.S. Environmental Protection Agency.

Erosion — The wearing away of the land surface by running water, wind, ice, or other geological agents.

Accelerated Erosion — Erosion in excess of what is presumed or estimated to be naturally occurring levels and is a direct result of human activities.

Gully Erosion — Erosion process whereby water accumulates in narrow channels and removes the soil to depths ranging from a few inches to 1 or 2 feet to as much as 75 to 100 feet.

Rill Erosion — Erosion process in which numerous small channels only several inches deep are formed.

Sheet Erosion — Spattering of small soil particles caused by the impact of raindrops on wet soils. The loosened and spattered particles may subsequently be removed by surface Runoff.

Erosion and Sedimentation Control Plan — A Site-specific plan identifying Best Management Practices or ways in which accelerated Erosion and sediment pollution will be minimized.

Frequency (Design Storm Frequency) — The recurrence interval of storm events having the same duration and volume. The Frequency of a specified Design Storm can be expressed either in terms of Exceedance Probability or Return Period.

Exceedance Probability — The probability that an event having a specified volume and duration will be exceeded in one time period, usually assumed to be one year. If a storm has a 1% chance of occurring in any given year, then it has an Exceedance Probability of 0.01.

Return Period — The average length of time between events having the same volume and duration. If a storm has a 1% chance of occurring in any given year, than it has a Return Period of 100 years.

Governing Body — The body that governs a municipality or county.

Homeowners Association — The association of persons formed by the residents of a housing locality to address their common problems and issues connected with their residence and their living in that area.

Impervious Cover — A surface composed of any material that significantly impedes or prevents natural Infiltration of water into soil. Impervious surfaces include, but are not limited to, roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

Infiltration — The downward entry of water into soil.

Karst Terrain — Regions that are characterized by formations underlain by carbonate rock and typified by the presence of limestone caverns and sinkholes.

Land Development — The development of one or more lots, tracts, or parcels of land by any means and for any purpose, but does not include easements, rights-of-way, or construction of private roads for extraction, harvesting, or transporting of natural resources. This definition includes projects that are part of a larger common plan of development or sale.

Land Development, Major — The development and / or subdivision of more than five lots, tracts, or parcels or any nonresidential Land Development that disturbs more than 5,000 square feet. Also, any development and / or subdivision that includes a new street shall be considered a major Land Development.

Land Development, Minor — The development and / or subdivision of five or fewer lots, tracts, or parcels; or where land is being transferred to be combined with an existing lot. To qualify as a Minor Land Development, the proposed project must be placed on existing streets and no new streets shall be proposed.

Land Disturbance Activity — Any land change that may result in soil Erosion from water or wind or the movement of sediments into state waters or onto lands in the State of West Virginia, including but not limited to clearing, grading, excavating, transporting, and filling of land.

Landscaping — The placement of vegetation in and around stormwater management BMPs.

Low Impact Development (LID) — Hydrologically functional Site design with pollution prevention measures to reduce impacts and compensate for development impacts on hydrology and water quality.

Managed Turf — Any of various grasses (such as Kentucky bluegrass or perennial ryegrass) grown to form turf.

Municipal Separate Storm Sewer System (MS4) — An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) with the following characteristics:

(a) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created or pursuant to state law), including special districts under state law such as a sewer district, flood control district, or drainage district, or similar

entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act that discharges into waters of the United States;

(b) Designed or used for collecting or conveying stormwater;

(c) Not a combined sewer;

(d) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) — The national program for issuing, modifying, monitoring, and enforcing permits under Sections 307, 402, 318, and 405 of the Clean Water Act.

Nonpoint Source Pollution — Contaminants such as sediment, nitrogen and phosphorous, hydrocarbons, heavy metals, and toxins whose sources cannot be pinpointed but rather are washed from the land surface in a diffuse manner by stormwater Runoff.

Parcel — A portion of a subdivision or any other lot of land intended as a unit for transfer of ownership or for development or both. The word "Parcel" includes the words "plot" or "Lot".

Peak Discharge — The maximum rate of flow associated with a given rainfall event or channel.

Percolation Rate — The velocity at which water moves through saturated, granular material.

Post-development — Refers to conditions that reasonably may be expected or anticipated to exist after completion of the Land Development activity on a specific Site or tract of land.

Pre-development — Refers to the conditions that exist at the time that plans for the Land Development of a tract of land are approved by the plan approval authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted establishes the Pre-development conditions.

Professional Engineer — An engineer who is licensed within a specific jurisdiction to offer professional services directly to the public.

Redevelopment — Any construction, alteration, or improvement on existing development.

Retention — Permanent storage of stormwater.

Retention Basin — A Stormwater Management Facility that includes a permanent impoundment, or normal pool of water, for the purpose of enhancing water quality and therefore is normally wet, even during non-rainfall periods. Storm Runoff inflows may be temporarily stored above this permanent impoundment for the purpose of reducing flooding or stream channel Erosion.

Riparian — Relating to or inhabiting the banks of a natural course of water.

Runoff — The portion of precipitation, snow melt, or irrigation water that runs off the land into surface waters.

Runoff Coefficient — The fraction of total rainfall that appears as Runoff;

represented as "C" in the rational method formula.

Runoff Reduction — The runoff reduction approach that seeks to maintain the same predevelopment runoff volume delivered to a body of water after a site is developed.

Sand Filter — A contained bed of sand that acts to filter the first flush of Runoff. The Runoff is then collected beneath the sand bed and conveyed to an adequate discharge point or infiltrated into the in-situ soils.

Silt Fence — A temporary linear sediment barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow Runoff.

Site — The parcel of land being developed, or a designated planning area in which a Land Development project is located.

Stormwater Hotspot — An area where the land use or activities are considered to generate Runoff with concentrations of pollutants in excess of those typically found in stormwater (see Table IV-1).

Stormwater Management Facility — A device that controls stormwater Runoff and changes the characteristics of that Runoff, including but not limited to the quantity and quality, the period of release, or the velocity of flow.

Stormwater Management Plan — A document containing material for describing how existing Runoff characteristics will be affected by a Land Development project and methods for complying with the requirements of the local program or chapter.

Stormwater Pollution Prevention Plan (SWPPP) — The erosion and sediment control plan and the post development plan submitted as part of the Site Registration Application form required in the NPDES General Permit.

Stream Buffers — The zones of variable width that are located along both sides of a stream and are designed to provide a protective natural area along a stream corridor.

Total Maximum Daily Load (TMDL) — A calculation of the maximum amount of a pollutant that a body of water can receive and still meet Water Quality Standards, and an allocation of that amount to the pollutant's sources.

Town — The municipal Corporation of Harpers Ferry, West Virginia.

Water Quality Standards — State-adopted and EPA-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses.

Watershed — A defined land area drained by a river, stream, or drainage way, or system of connecting rivers, streams, or drainage ways such that all surface water within the area flows through a single outlet.

Appendix Attachments.

BE IT FURTHER ENACTED that this Ordinance shall come into effect the 16th day

of February, 2015.

Passed FIRST READING the 12th day of January, 2015.

Passed SECOND and FINAL READING the ___ day of _____, 2015.

_____ _____

Greg Vaughn, Mayor Kevin Carden, Recorder