

ARTICLE 9. STORMWATER MANAGEMENT

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9.1 PURPOSE; JURISDICTION; APPLICABILITY; INTENT

A. Purpose. The purpose of this section is to provide a mechanism for the proper management of stormwater by ensuring that development activities do not adversely impact surface water and groundwater resources, and that adequate facilities are provided for the management of stormwater in terms of both quantity and quality.

B. Jurisdiction and applicability. This section shall apply to all development and redevelopment activity within the city, with exemptions as noted in section V-6.6. Nothing in this section shall relieve the developer from complying with the state regulations in F.A.C. Ch. 62-25, and obtaining any required permits. Runoff calculations as required by section V-6.6 shall include stormwater originating in areas outside the city, which contribute to the total runoff for the site in question. The following exemptions and waivers shall apply:

1. Exemptions from stormwater management plan submission:

- a. One single-family, duplex, triplex, or quadruple structure; provided it is not part of a larger plan of development or sale and; provided that, in the opinion of the Public Works Director or his designee, the development will not increase the rate or volume of runoff from the residential lot or deposit pollutants or sediments beyond the boundary of the residential lot; and
- b. Developments, which discharge into a permitted regional stormwater discharge facility, which can meet appropriate treatment criteria.

2. Emergency exemptions. This section shall not be construed to prevent the doing of any act necessary to prevent material harm to real or personal property as a result of a present emergency. Emergency exemptions shall be reported consistent with the requirements of section II-8.

3. Waivers:

- a. A waiver of the stormwater management plan submission may be requested by submitting information, including:
 - i. The name, address, and telephone number of the developer and owner;
 - ii. A description and drawing of the proposed development;
 - iii. The location of the development; and

- iv. Any other information requested by the city.
- b. The waiver may be granted if the information requested in subsection (3)a. of this section demonstrates that the development is not likely to:
 - i. Significantly increase the rate or volume of runoff;
 - ii. Have an adverse impact on a wetland, watercourse, or waterbody; or
 - iii. Significantly contribute to the degradation of the water quality.
- c. Waivers of the stormwater management plan submission or requirements shall only apply to those developments, which limit the increase in impervious surfaces to 500 square feet or less and those that limit increases to 1,000 square feet or less of pervious surfaces. If a waiver is provided, the owner assumes the engineer's responsibility. (See section V-6.6).
- d. Waivers of the detention requirements may be requested for developments located near the point of charge of major watersheds; provided that, in the opinion of the city manager or his designee, runoff from the development will not increase the potential for flooding downstream.
- e. No development shall be exempt from the stormwater treatment requirements, except as indicated in subsection (b)(1) of this section.
- f. The following types of development shall not be eligible for stormwater management waivers:
 - i. Shopping centers;
 - ii. Other large Commercial and manufacturing facilities; and
 - iii. Roads and parking lots.

C. Intent.

The implementation of this section is intended to accomplish the following:

1. Provide for reasonable use and development of property with minimum adverse effects to the environment;
2. Minimize public and private property damage resulting from erosion, sedimentation, flooding, and other stormwater-related problems;
3. Protect, restore, and maintain the chemical, physical, and biological quality and quantity of surface water and groundwater;
4. Minimize the transport of sediments and other pollutants to receiving waters;
5. Ensure that stormwater management systems are designed consistent with accepted engineering practices;
6. Promote the use of natural drainage features for stormwater management and discourage the alteration of such features;

7. Encourage the use of swales or other natural retention/detention system to increase infiltration, settle suspended solids, and remove pollutants;
8. Encourage the construction of drainage systems, which aesthetically and functionally approximate natural systems;
9. Facilitate recharge of groundwater systems;
10. Minimize adverse impacts from urbanization on the beneficial functioning of the hydrologic cycle;
11. Develop interagency relationships with other governmental units involved in stormwater management, including the Florida Department of Transportation (FDOT) and other state agencies, the Northwest Florida Water Management District, the U.S. Navy, the Santa Rosa School Board, and the county, in order to address problems which cross-jurisdictional boundaries;
12. Require that developments be responsible for the provision of adequate stormwater controls in compliance with state stormwater requirements, or with more stringent requirements where necessary;
13. Provide special protection measures for waters with special quality designations, such as the Blackwater River, which is designated as an outstanding Florida water;
14. Ensure that future development and redevelopment activity complies with the city's adopted concurrency management system and related level-of-service standards;
15. Ensure the continuing adequacy of stormwater management systems by requiring proper maintenance and by implementing an effective inspection and enforcement program; and
16. Ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities, which may have an adverse impact upon community waters.

9.2 DEFINITIONS

The following words, terms and phrases, when used in section V-6.1, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Adverse impact means any direct or indirect effect likely to cause, or actually causing, a decline in the stability, natural function, or natural diversity of any environmental resource or system.

Applicant means a person applying for or one granted a permit to proceed with a project. May be used synonymously with the terms "developer" and "owner."

Best management practice (BMP) means a practice or combination of practices that are the most effective, practical means of preventing or reducing the amount of pollution to a level compatible with applicable regulating standards.

Clearing means the removal of trees and brush from the land, but shall not include, the ordinary mowing of grass.

Detention means the collection and storage of surface water with subsequent gradual discharge.

Developer means any person who engages in development activity either as the property owner or as the agent of a property owner.

Development.

(1) The term "development" means any manmade change to improved or unimproved real estate including, but not limited to:

- a. Buildings or other structures;
- b. Mining, dredging, filling and land clearing;
- c. Grading;
- d. Paving;
- e. Excavating;
- f. Drilling operations; or
- g. The permanent storage of materials.

(2) The term "development" does not include maintenance activities.

Discharge.

(1) The term "discharge" means the release of stormwater by any means, including spilling, leaking, seeping, pouring, emitting, emptying, or dumping;

(2) The term "discharge" does not include the release of stormwater by evaporation, transpiration, or natural percolation to the groundwater.

Drainage facility means any component of the drainage system.

Drainage system means the system through which water flows from the land. The term "drainage system" includes all watercourses, waterbodies, and wetlands as well as structures or other means of conveyance.

Erosion means the wearing or washing away of soil by the action of wind or water.

Exemption means a condition which provides immunity from obligations or requirements.

Impervious surface means a surface which has been compacted or covered with a layer of material with the result that it is highly resistant to infiltration by water.

Natural systems means systems which predominately consist of or use those communities of plants, animals, bacteria, and other flora and fauna which occur indigenously on the land, in the soil, or in the water.

Off-site means not located on the principal parcel of land proposed to be developed.

Owner means the person in who is vested the fee ownership, dominion, or title of property, e.g., the proprietor. The term "owner" also includes a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant, including a developer.

Person means any and all persons, natural or artificial and includes any individual, firm, corporation, government agency, business trust, estate, heirs or assigns, trust, partnership, association, two or more persons having a joint or common interest, or any other legal entity.

Predevelopment conditions means those conditions which existed prior to alteration, resulting from human activity, of the natural topography, vegetation and rate, volume and direction of stormwater flow, as indicated by the best available historical data.

Receiving bodies of water means any waterbodies, watercourses, or wetlands into which surface waters flow either naturally, in manmade ditches or conveyances, or in a closed conduit system.

Retention means the collection and storage of runoff without subsequent discharge to surface waters.

Sediment means fine particulate material, whether mineral or organic, that is in suspension or has settled in a waterbody.

Sedimentation facility means any structure or area which is designed to hold runoff water until suspended sediments have settled.

Site means any tract, lot or parcel of land or combination of tracts, lots or parcels of land which are in one ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision, or project.

Stormwater means the flow of water which results from, and which occurs during and immediately following, a rainfall event.

Stormwater management facility means a component of a stormwater management system.

Stormwater management plan means the detailed analyses, drawings, and related supporting documents, which describes how the proposed stormwater management system for the development has been planned, designed, and will be constructed to meet the requirements of this section.

Stormwater management system means the structural, nonstructural, and designed features of a property or watershed which are implemented to control stormwater, incorporating methods and facilities to collect, convey, channel, divert, store, absorb, inhibit, treat, use or reuse water in order to prevent erosion, excessive ponding, flooding, over-drainage, environmental degradation, or water pollution, or otherwise affect the quantity or quality of stormwater.

Surface water means water upon the surface of the earth, whether diffused or contained in natural or artificial bounds.

Swale means a manmade trench which:

- (1) Has a top width-to-depth ratio the cross section of which is equal to or greater than 6:1, or side slopes equal to or greater than three feet horizontal to one-foot vertical;
- (2) Contains contiguous areas of standing or flowing water only during or following a rainfall event;
- (3) Is planted with or has established vegetation suitable for soil stabilization, stormwater treatment, and nutrient uptake; and

(4) Is designed to take into account the soil erodibility, soil percolation, slope length, and drainage area so as to prevent erosion and reduce pollutant concentration of any discharge.

Vegetation means all plant growth, especially trees, shrubs, vines, ferns, mosses and grasses.

Waiver means a granted condition which allows immunity from obligations or requirements, upon request and approval.

Waters or community waters means any and all water on or beneath the surface of the ground. The term "waters or community waters" includes:

- (1) The water in any watercourse, waterbody or drainage system; and
- (2) Diffused surface water and water percolating, standing or flowing beneath the surface of the ground.

Waterbody means any natural or artificial pond, lake, reservoir or other area which ordinarily or intermittently contains water and which has a discernible shoreline.

Watercourse means any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, street, roadway, swale, or wash in which water flows in a definite direction, either continuously or intermittently, and which has a definite channel, bed, or banks.

Wetland means an area within the landward extent of surface waters of the state, pursuant to F.A.C. § 62-340.200, or any area which is flooded by surface water or groundwater with a frequency sufficient to support, and which under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions, known as hydric soils, for growth and reproduction. The term "wetlands" includes:

- (1) Swamps, marshes and bogs; and
- (2) Similar areas such as sloughs, wet meadows, river overflows, mud flats, and natural ponds.

9.3 EROSION AND SEDIMENTATION CONTROLS.

A. Use. No clearing, grading, cutting, or filling shall commence until erosion and sedimentation control devices have been properly installed and inspected by city staff in accordance with **section V-6.8** between the area to be disturbed and adjacent property, water bodies, watercourses, and wetlands. Minimal clearing and excavation required for the installation or erosion and sedimentation control devices is allowed.

B. Methods. Erosion shall be minimized and sediment retained on the development site through the application of the best management practices such as those outlined in **chapter 6, sections 1.01 through 1.86 of the Florida Development Manual (state department of environmental protection)**. Allowable methods include, but are not limited to, the following:

1. Limiting the amount of clearing necessary;
2. Staging clearing activities to minimize the total area cleared at any one time;

3. Temporary gravel construction entrances;
4. Straw bale barriers;
5. Silt fences;
6. Storm drain inlet protections;
7. Temporary diversion dikes;
8. Temporary sediment traps and basins;
9. Temporary stream crossings;
10. Seeding and sodding so as to establish ground cover; and
11. Erosion control and seeding mats.

C. Maintenance. Controls shall be maintained according to the following:

1. Erosion and sedimentation controls must be maintained until a permanent vegetative ground cover is established. All disturbed areas shall be permanently stabilized through the establishment of ground cover upon completion of the development activities.
2. All new residential construction shall require sodding of the entire disturbed area of the lot. A certificate of occupancy will not be issued prior to placement of the sod.

9.4 STORMWATER MANAGEMENT PLAN REQUIREMENTS

Development which is not exempt, and for which a waiver has not been issued pursuant to section V-6.2, shall submit a stormwater management plan to the planning and development department. The plan must be approved prior to the recording of a plat or the subdividing of land; the alteration of any existing drainage system; or the commencement of any development activity.

A. Preparation of stormwater management plan. The stormwater management plan shall be prepared by a professional engineer registered in the state practicing within his area of expertise.

B. Components of stormwater management plan. For all nonexempt development for which a waiver has not been obtained, a stormwater management plan must be submitted. This plan shall not be approved unless it clearly indicates that the requirements in section V-6.7 will be met. The stormwater management plan shall contain, at a minimum, the following:

1. The name, addresses, and telephone numbers of the owner and the developer. In addition, the legal description of the property shall be provided and its location with reference to such landmarks as major water bodies, adjoining roads, railroads, or subdivisions shall be clearly identified by a map.
2. The existing environmental and hydrologic conditions of the site and or receiving waters and wetlands shall be described in detail, including the following:
 - a. The direction, flow rate, and volume of the stormwater runoff under existing conditions and, to the extent practicable, predevelopment conditions;

- b.** The location of areas on the site where stormwater collects or percolates into the ground;
 - c.** A description of all watercourses, waterbodies, and wetlands on or adjacent to the site or into which stormwater flows. Information regarding their water quality and the current water quality classification, if any, given them by the state department of environmental protection shall be included;
 - d.** Groundwater levels, including seasonal fluctuations;
 - e.** Location of floodplains; and
 - f.** Description of vegetation, topography, and soils;
- 3.** Proposed alterations of the site shall be described in detail, including:
- a.** Changes in topography;
 - b.** Areas where vegetation will be cleared or otherwise destroyed;
 - c.** Areas that will be covered with an impervious surface and a description of the surfacing material; and
 - d.** The size and location of any buildings or other structures;
- 4.** Predicted impacts of the proposed development on existing conditions shall be described in detail, including:
- a.** Changes in water quality;
 - b.** Changes in groundwater levels;
 - c.** Changes in the incidence and duration of flooding on the site and upstream and downstream from it;
 - d.** Impacts on the quantity and quality of wetlands; and
 - e.** Impacts on the quantity and quality of vegetation;
- 5.** All components of the drainage system and any measures for detention, retention, or infiltration of water or for the protection of water quality shall be described in detail, including:
- a.** The channel direction, flow rate, volume and quality of stormwater that will be conveyed from the site, with a comparison to existing conditions and, to the extent practicable, predevelopment conditions;
 - b.** Detention and retention areas, including plans for the discharge of contained waters, maintenance plans, and predictions of water quality in those areas;
 - c.** Areas of the site to be used or reserved for percolation, including a prediction of the impact on groundwater quality;
 - d.** A plan for the control of erosion and sedimentation which describes in detail the type and location of control measures, the stage of development at which they will be put into place or used, and provisions for their maintenance. The use of control measures must be in accordance with **section V-6.5**;
 - e.** Any other information which the developer or the city believes is reasonably necessary for an evaluation of the development; and

6. Construction plans and specifications for all components of the stormwater management system.

9.5 PERFORMANCE AND DESIGN STANDARDS.

A. New Development

The following standards shall be applied to all new and permitted stormwater management facilities:

1. Stormwater treatment. The first one inch of runoff from development and off-site contributing areas shall be treated, or the first 1½ inches of runoff for drainage areas greater than 100 acres.

a. The required treatment volume shall be recovered within 36 hours, following a storm event (72 hours with a safety factor of two).

b. Soil percolation rates shall be conclusively verified by a geotechnical report, soil survey or other methods acceptable to the city.

c. When under drains or side drains are utilized, the filter media shall conform to the following criteria:

i. Permeability rate of 1.5 to 5.0 feet per hour;

ii. Less than one percent silty clay and organic material;

iii. Uniform coefficient of 1.5 to 4.0;

iv. Effective grain size of 0.22 to 0.55 mm in diameter; and

v. Media shall be tested by a certified testing lab and the results provided to the city for approval prior to installation.

2. Detention facilities.

a. Detention facilities shall provide storage for all critical storm events, up to and including, the 100-year, 24-hour storm event.

b. Discharge from the detention facilities shall be limited to predevelopment runoff rates for all storm events, up to and including, the 100-year storm event.

c. One foot (minimum) of freeboard above the maximum calculated high-water elevation shall be provided for all detention facilities, unless in the opinion of the city manager, with the concurrence of the city engineer and planning and development director, a reduction in the freeboard will not increase the potential for erosion, flooding, or other stormwater related problems.

d. Bank slopes shall be limited to 3:1 slopes for city maintained facilities. Bank slopes greater than 3:1 may be used for private developments only with city approval.

e. An emergency overflow shall be provided for all stormwater facilities. Overflows shall be protected by concrete, riprap or other acceptable stabilizing material, which will prevent the failure of the embankments during catastrophic storm events.

- f.** The calculation of peak runoff rates for predevelopment conditions shall utilize the FDOT drainage manual, TR55 or other applicable formulas acceptable by the city for calculating time of concentration.
- g.** Exfiltration systems may be used for private developments only.
- h.** Discharge facilities shall include a baffle, skimmer, grease trap, or similar mechanism.
- i.** Off-site treatment of stormwater is allowable if:
- i.** It is not practicable to use on-site facilities, due to area limitations or other unique circumstances;
 - ii.** The conveyance system from the site to the off-site treatment facility has the capacity to convey the amount of stormwater runoff required to be treated in subsection V-6.7(1); and,
 - iii.** The off-site treatment facility has the appropriate design and capacity to treat the anticipated stormwater runoff in accordance with the standards established in subsection (1) of this section.
- j.** Runoff buffers. For sites which contain less than 1,000 square feet of impervious surface, alternatives to stormwater detention or retention facilities that utilize landscaped buffers or natural area as a means of attenuating rate of runoff may be allowed; provided the owner can demonstrate that no significant adverse impacts will result and that the purposes and standards of this section are met. Must apply for waiver per **subsection V-6.2(b)(3)**.
- k.** Use of wetlands for stormwater discharge may be permitted as allowable by F.A.C. ch. 62-25.
- l.** Stormwater treatment facilities shall be designed per F.A.C. § 62-25.025 (1—5).
- m.** The developer may require to design stormwater management system to function in accordance with these regulations after all uphill property has been developed.
- n.** All stormwater management facilities shall be designed and constructed to have a minimum 25-year life with replacement to be the responsibility of the owner of the facilities. Facilities that fail will be required to be redesigned or reengineered.
- o.** In phased developments, the stormwater management system for each phase must be able to function independently.
- p.** The use of natural drainage systems is required, to the maximum extent practicable.
- q.** The alteration of natural drainage systems, such as dredging, clearing, widening, etc. shall be prohibited, unless no reasonable alternatives exist.
- r.** Detention/retention areas whose banks have slopes steeper than 3:1 ratio or 3 feet deep, shall be fenced and shall comply with the landscaping requirements of section V-5.4.
- s.** Vegetated buffers of sufficient width to prevent erosion shall be retained or created along the banks of all detention/retention areas.
- t.** Wet detention may be used for private development only with the city's approval.

u. A maintenance plan shall be provided for all privately owned and maintained stormwater management systems. The maintenance plan must be approved by the city and acknowledged by the owner. The stormwater management system shall be maintained in perpetuity by the owner or his assigns or successors in accordance with the maintenance plan.

v. All city maintained ponds five feet and deeper shall have maintenance ramps designed at 6:1 slope. The maintenance ramp shall be located in close proximity to the maintenance access point.

There shall be a minimum ten-foot area between the lip of the pond and the pond fencing and/or site property line. The ten-foot buffer area shall have a slope no steeper than ten-foot horizontal to one-foot vertical. While the buffer area may be used in the pond maximum capacity and/or freeboard calculation, the buffer area shall not be used as a part of the one-inch retention.

w. All ponds shall be required to have a positive discharge which shall be in the form of a weir or other impervious flow control device that provides a course for overflowing stormwater to exit the pond without damage to the pond banks.

3. Underground stormwater system standards.

a. Generally. Underground stormwater seepage systems may be permitted in all zoning districts upon city staff approval to accomplish stormwater retention and percolation requirements provided those systems are designed for the prevention of clogging by fine material and for ease of clean with conventional sewer cleaning equipment.

b. Design criteria.

i. Underground stormwater treatment systems shall be designed by a licensed professional engineer.

ii. Underground stormwater treatment systems shall be designed so as to accept a retention volume calculated for two inches of runoff from all contributing impervious areas.

iii. A system overflow outfall shall be required.

iv. The bottom of the stormwater treatment system shall be constructed a minimum of one foot above the estimated high groundwater elevation. The estimated high groundwater elevation and a modeled recovery analysis shall be performed by a licensed geotechnical engineer.

v. Filtration media shall consist of a gravel or river rock to be approved by city staff. A limestone based or crushed concrete media is not permitted.

vi. A pretreatment structure shall be incorporated to remove all debris and sedimentation from the stormwater runoff prior to entering the ex-filtration system.

vii. Proper inspection and maintenance access ports/manholes shall be installed on all structures and ex-filtration termination points.

viii. The design shall meet such site or project-specific additional criteria as the director of public works may require.

ix. The design shall not allow or permit the grade of the site to be elevated above two feet from the existing grade of the adjoining properties or adjoining right-of-ways.

c. Inspection and maintenance criteria.

i. Upon initial construction completion, an "as-built" drawing confirming that the stormwater treatment system was constructed according to the city approved drawings shall be signed and sealed by the engineer of record and submitted to the city public works department.

ii. Inspection, maintenance, and testing procedures (including report forms) shall be provided by the engineer of record and submitted to the city for approval, and approved by the city, before a permit is issued.

iii. Monthly inspections shall be performed by responsible party and findings logged and/or recorded. Monthly inspection logs shall be submitted annually to the city public works department.

iv. Routine maintenance and cleaning operations shall be performed and logged and/or recorded. Maintenance and cleaning logs shall be submitted annually to the city public works department.

v. A volume test shall be performed on the underground stormwater treatment system and an engineer certified volume test report, satisfactory to the city, submitted every three years to the city public works department.

vi. As a means of ensuring the future maintenance, repair, or replacement of the underground stormwater treatment system, the owner of the property shall be required to enter into an agreement suitable for recording in the public records, which shall run with the land and bind future owners of the property, reflecting the owner's responsibility to perform future maintenance, repairs, or replacement, as deemed reasonably necessary by the city, and in addition the owner's responsibility to pay for such future maintenance, repairs, or replacement, as deemed reasonably necessary by the city, regardless of by whom the future maintenance, repairs, or replacement is performed. The city shall have the right, but not the obligation, to perform or have performed future maintenance, repairs, or replacement, as deemed reasonably necessary by the city, and the property owner shall be responsible for the costs of such future maintenance, repairs, or replacement, the recorded agreement referred to herein shall reflect this obligation of the property owner.

4. Conveyance systems.

a. Stormwater conveyance systems shall be designed to accommodate all critical duration storm events, up to and including, the 25-year, 24-hour storm event.

b. All curb and gutters shall have a minimum slope of 0.30 percent.

c. Conveyance pipes shall be sloped to achieve a minimal scouring velocity of two feet per second.

d. Energy dissipaters, riprap, or other energy dissipating devices acceptable by the city shall be utilized at all discharge points into or out of the stormwater management facilities where velocities may create erosion problems.

e. Gutter spread shall not exceed one-half of the driving land width. Clarification: Gutter spread calculations shall be based on the five-year design storm.

5. Permits.

The following permits shall be obtained, prior to approval by the city of the stormwater management plan:

a. A general permit for new or modified stormwater discharge facilities from the state department of environmental protection;

b. A drainage connection permit from the state department of transportation for developments discharging into state owned rights-of-way; and

c. A NPDES permit from the United States Environmental Protection Agency for developments of five acres or more.

B. Non-Conforming and Existing Development.

Developments existing or permitted prior to the effective date of this code and which are not in conformance with the provisions of these regulations may be continued, subject to the following conditions:

1. Developments, which are not exempt under **section V-6.2**, may not be expanded, altered, or redeveloped to the extent that impervious surface area is increased by **more than 10 percent or 500 square feet**, whichever is less.

2. Developments, which are not exempt under **section V-6.2**, may not be expanded, altered, or redeveloped to the extent that **pervious surface** area is increased by more than 25 percent or 1,000 square feet, whichever is less.

3. **The Performance and Design Standards** for new development shall apply to all construction and redevelopment projects where the construction value exceeds 50 percent of the assessed value of the improvements detailed on the most current tax assessment role. Building phases shall be combined to determine applicability of the 50 percent threshold criteria.

a. **The stormwater management requirement for the redevelopment**, renovation, or additions to existing buildings, which exceed the limits of B(1) above but are below the 50 percent threshold of B(3) shall be the retention onsite of the first one-half inch of stormwater runoff from all impervious surfaces.

i. **The stormwater retention requirements** of this section shall be accomplished by utilizing surface or underground stormwater facilities.

ii. **These stormwater management requirements** for the retrofit of existing development do not allow properties constructed in conformance with the requirements for the first inch of retention to revert to a lesser requirement.

4. If a development is destroyed by any means, including fire, wind, and flood, to an extent of 50 percent or more of its assessed value, reconstruction shall be in conformance with the requirements of these regulations.

5. If the use of a development, which is not exempt under **section V-6.2**, is discontinued for six consecutive months, any future nonexempt use must conform to the provisions of this section; provided the requirements do not make the development unusable. In such case, a waiver may be requested in accordance with **subsection V-6.2(b)(3)**.

6. Non-Residential Retrofits and Incentives.

a. For those non-residential developments existing or permitted prior to the effective date of this code and which are not in conformance with the provisions of these regulations may undertake effective retrofitting of onsite existing stormwater facilities in order to improve surface runoff conditions.

b. Stormwater facility improvements demonstrating increased retention/detention and reduced runoff may apply for a **stormwater fee credit** which may result in a stormwater utility fee reduction for the life of the improvements.

i. Construction of any new stormwater facilities described above shall meet the performance and design standards of this section 9.5.

c. **Approved methods of stormwater retention and runoff reduction** may include but are not limited to the installation of pervious pavements, green roofs, bio-swales, rain-scapes, raingardens, planter boxes, cisterns, buffer areas, detention/retention pond expansion, and increased green space.

i. **Reductions in impervious surface area**, provided that the reductions do not create a violation of any other applicable component of these regulations, shall receive the greatest reductions in stormwater utility fees.

d. Reductions of runoff amounts or retention onsite of up to the first one-half inch of stormwater runoff shall result in up to a 50 percent reduction in the stormwater fee. Reductions of runoff amounts or retention onsite of amounts greater than the first one-half inch of stormwater runoff shall result in up to a 100 percent reduction in the stormwater fee.

e. It is the responsibility of the applicant for any stormwater fee reduction to demonstrate the effectiveness of the stormwater runoff improvements. The extent of stormwater runoff reduction and method used will determine the level of demonstrated effectiveness required.

C. Performance Standards for the Downtown Commercial Mixed-Use District

1. In recognition of the existing developed density of properties within the central business district, special stormwater retention requirements are provided for the development or redevelopment of these properties.

2. On properties within this district the stormwater retention requirement shall be either:

a. **The provision of onsite stormwater retention** of, at minimum, the first one-half inch of stormwater runoff from all impervious surfaces into surface or subsurface facilities, if and only if it can be determined by a certified engineer that the first one inch of stormwater runoff retention cannot be accomplished; or

b. **The payment to the city of a fee in lieu of stormwater management** to be equal to the cost of providing subsurface stormwater retention facilities. These fees are to be earmarked and utilized by the

city for construction and improvement to capital facilities of the offsite stormwater management system within the city drainage basin. Such cost estimates shall be certified by a registered engineer. The Board of Appeals shall act to resolve any conflicts or disputes regarding the appropriate fee in lieu of stormwater management.

3. Development in the Historic District and/or the Community Redevelopment Areas may require additional approval.

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