

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village Council Meeting**  
**10/9/2018**

<b>SUBJECT:</b>	<b>SUBMITTED BY:</b>
Stormwater Regulation Amendments	Naniel Newlon Director of Public Works

**SYNOPSIS**

An ordinance has been prepared which amends stormwater management regulations for residential developments.

**STRATEGIC PLAN ALIGNMENT**

*Consider Amendments to Stormwater Regulations* was identified as a Priority Action Item for 2017-2019. As part of this item, the Village Council directed staff to consider more stringent stormwater management regulations to lessen the negative impacts of increased runoff generated by construction activity.

**FISCAL IMPACT**

N/A

**UPDATE & RECOMMENDATION**

This item was discussed at the October 2, 2018 Village Council meeting. Staff recommends approval at the October 9, 2018 active agenda.

**BACKGROUND**

**Priority Action Item Issue & Objectives**

Issue: Code-compliant development activity generates stormwater runoff which sometimes negatively impacts adjacent properties.

Objectives:

- Reduce the negative impacts of runoff caused by development activities
- Permitting process should accommodate residential renovation & redevelopment

The Village Council previously discussed this issue at their [October 10, 2017](#), [December 5, 2017](#), [February 13, 2018](#), [April 3, 2018](#), [May 8, 2018](#) and [September 11, 2018](#) meetings.

**Proposed Stormwater Regulations**

Based on Village Council direction provided at previous meetings and staff analysis of the identified options, staff prepared a draft ordinance (attached) with the following regulations:

- Require All Sump Pumps Installed with a New Foundation to Discharge Into a 50 cubic foot Storage/Infiltration System
- Require All New Single Family Houses and Additions of 400 s.f. Footprint Expansion or More to Provide Stormwater Storage according to the following table.

*Proposed Storage Volume Requirements*

<b>Net New Impervious Area</b>	<b>Required Storage Volume</b>
No Change or Reduction	--
1 to 699 sf	100 cubic feet
700 to 999 sf	150 cubic feet + BMP Storage Volume
1,000 to 1,999 sf	250 cubic feet + BMP Storage Volume
2,000 sf or more	250 cubic feet + BMP Storage Volume

The proposed amendments also include the following:

- Clarifies that appeals may be filed only for the administrator's decisions and application of code requirements
- Clarifies requirements for sump pump discharge design and location
- Requires PCBMPs to:
  - drain within 96 hours
  - avoid concentrated discharge areas
  - be connected to the public stormwater management system
  - meet setback regulations
  - be subject to inspections
  - be fenced during construction activities
- Requires drywells to be designed with a bottom elevation higher than the estimated seasonal high water level

**Effectiveness & Estimated Cost**

The proposed amendments are intended to achieve the project objectives of mitigating the negative impacts of stormwater runoff caused by new residential development and to maintain a permitting process which accommodates residential renovation and redevelopment.

**Attributes of the Proposed Regulations**

- Provides Improvement over Current Regulations
  - 2.3 Times the Amount of Storage Currently Required
  - 99% of New Houses Required to Provide Storage
- Provides Enhanced Stormwater Mitigation for All Properties
  - With or Without Connection to Stormwater System
  - All Soil Types
- Costs are Small Percentage of Total Project Cost (\$7,000 to \$30,000)
- Can be Provided Using Shallow Storage Construction Techniques
- Minimal Impact on Yard “Useability”
- Predictable, Easy to Calculate
- Low Administrative Burden
- Continues to Provide Incentives to Avoid Increases in Impervious Area

*Proposed Regulations - Typical New House Analysis*

<b>Net New Impervious</b>	<b>Storage Volume</b>	<b>Area Needed for Storage</b>	<b>Est. Cost</b>
Negative to Zero	50 c.f.	50 s.f.	\$7,000
1 to 699 s.f.	150 c.f.	150 s.f.	\$10,000
700 to 999 s.f.	660 c.f.	660 s.f.	\$25,000
1,000 to 1,999 s.f.	700 c.f.	700 s.f.	\$25,000
2,000 s.f. or more	990 c.f.	990 s.f.	\$30,000

*Proposed Regulations Applied to New Houses Constructed in 2016 & 2017*

<b>Net New Impervious in s.f.</b>	<b>Number of Houses</b>	<b>Impervious Area Change in s.f.</b>	<b>Avg. Change in Impervious in c.f.</b>	<b>Storage per Current Regs in c.f.</b>	<b>Storage per Proposed Regs in c.f.</b>
Negative	26	(10,670)	(410)	--	1,300

1 - 699 sf	62	27,559	445	--	9,300
700 - 999 sf	--	--	--	--	--
1,000 - 1,999sf	12	19,798	1,650	4,264	7,264
2,000 sf +	34	119,812	3,523	13,606	23,806
<b>Total</b>	<b>134</b>	<b>156,499</b>	<b>1,168</b>	<b>17,870</b>	<b>41,670</b>

*Proposed Regulations Level of Service*

Category	Typical Net New Impervious Area	Storage Provided	Inches of Rain in 24 Hours the Storage Area Can Accommodate
Reduction	-410 sf	50 cf	N/A*
1-699 sf	445 sf	150 cf	4 inches
700-999 sf	850 sf	660 cf	9.3 inches
1000-1999 sf	1650 sf	700 cf	5 inches
2000 or more sf	3524 sf	990 cf	3.4 inches

\*NOTE: This calculation cannot be performed since the impervious area on the property would be reduced. Generally speaking, a 50 cf storage basin can accommodate a 0.2 inch 24-hour rain event.

**ATTACHMENTS**

Responses to Council Questions  
Ordinance

## Staff Responses to Council Questions October 9, 2018

### Active Agenda

#### **ORD 2018-7909 A. Ordinance: Amend Certain Stormwater Provisions**

1. *This does not include any requirements for new detached garage, driveway, or other site work – correct? It says "new net impervious" but also says it's for new SFR and new Major Additions. Detached garages are neither of those. But also not limited from the text listing porches, decks, patios.*

Correct. A permit application for a detached garage, driveway or other site improvements would not be required to provide stormwater storage. A permit application for a new single family house or an addition to a single family house with a footprint expansion of 400 square feet or more would be required to provide stormwater storage.

2. *All reference to interior remodeling or other non-addition work has been removed. Correct? I can't find it, but just want to verify.*

Correct.

3. *What will be done or suggested or approved by staff when reviewing properties whose ground water level is less than 18" below the surface - as is the case for many locations in town? Or the clay does not allow water to percolate?*

The required storage would be installed above this level of water or the applicant could choose to install a closed basin that connects to a stormwater system.

4. *Proposed required storage volume for negative to 0 increase in net impervious area is listed as 0 on page 2, but 30cf on page 3. The other numbers are off, too. The heading on page 3 is for typical new houses - so I'm not sure why there's a difference.*

Table #1 below contains the ordinance regulations for required stormwater storage.  
*Proposed Storage Volume Requirements*

*Table 1 - Proposed Regulations*

<b>Net New Impervious Area</b>	<b>Required Storage Volume</b>
No Change or Reduction	--
1 to 699 sf	100 cubic feet
700 to 999 sf	150 cubic feet + BMP Storage Volume
1,000 to 1,999 sf	250 cubic feet + BMP Storage Volume
2,000 sf or more	250 cubic feet + BMP Storage Volume

Table #2 below applies the regulations to a typical house within each net new impervious range. For purposes of this table, staff assumed that each new house would have a sump pump. Note also that the table shows the existing PCBMP storage requirements for new houses with 700 square feet or more of net new impervious area.

*Table 2 - Typical New House Analysis*

<b>Net New Impervious</b>	<b>Storage Volume</b>	<b>Area Needed for Storage</b>	<b>Est. Cost</b>
Negative to Zero	50 c.f.	50 s.f.	\$7,000
1 to 699 s.f.	150 c.f.	150 s.f.	\$10,000
700 to 999 s.f.	660 c.f.	660 s.f.	\$25,000
1,000 to 1,999 s.f.	700 c.f.	700 s.f.	\$25,000
2,000 s.f. or more	990 c.f.	990 s.f.	\$30,000

5. *Is there any possibility of changing the wording, or emphasizing the fact that "drain across 20' of property" (top of page 20) means the WATER must actually run across 20' of property, not run a 20' flexible pipe from the discharge to the property line? How will this be enforced? The same complaint system people are already using? In a typical situation when a discharge point is at the corner of a house, maybe 5' from a property line with a swale, are people expected to run a flexible pipe to somewhere 20' from the property line, and then let the water run across the yard toward the property line? Again, how will this be enforced?*

The proposed ordinance states downspouts and other piped discharge "must drain across a minimum of twenty feet (20') of pervious surface prior to leaving the site." This means any underground pipe must stop short of the property line so the runoff will flow across at least 20 feet of grass (or other permeable surface). This would prevent piping the discharge all the way to the property line or to a driveway or other paved/impervious surface. Depending on the topography of the site, piped discharge could discharge into a swale within the 5 foot sideward setback and then be conveyed to the street over at least 20 feet of permeable (likely grassy) surface. This will must be inspected for compliance prior to closing out the permit. Any work done without a permit or after the permit is closed out would be handled by Code Enforcement.

6. *Are the affidavits acknowledging understanding of this new code by the land owner and developer (page 16 #2) going to be part of legal documents that are sold with a house? So, a*

*builder puts up a house, signs the understanding, sells the house, and the new homeowner fills in a rain garden with mulch. Are they now on the hook for the \$750/day fine?*

The Village will file with the DuPage County Recorder's Office a Note to Title alerting all homeowners (and potential homeowners) of the existence of the PCBMP / Residential Storage on site and the requirement to maintain it. If the new homeowner has filled in a rain garden, the Village would follow the procedures identified in Section 26.1702. Staff seeks compliance with code requirements and works to facilitate compliance prior to the issuance of citations with fines.

*7. What amount of time is appropriate for the 'warning citation issued' (page 25 #7) for people to remedy the situation?*

The amount of time will be included in the notice and will be dependent upon the nature of the violation. A citation would be issued if the violator does not correct the deficiency in the defined amount of time. Generally speaking, the time to address a violation ranges from one week to 30 days.

*8. If there's a right to appeal, based on a claim that they didn't know about it (page 26, B), does that negate the need for my question #6? New homeowners can just say they didn't know about it? Regardless of damage done?*

The right to appeal is limited to the administrator's application of the regulations. Not being aware the code requirements is not a basis for an appeal.

*9. If this is voted on and approved on Tuesday, when will it take effect? Immediately? That appears to be the case, based on the last line. But everyone who's already got permits approved won't need to comply? Understandable, just clarifying.*

The ordinance would take effect on January 1, 2019. All permits applied for before January 1, 2019 would be subject to the current ordinance.

VILLAGE OF DOWNERS GROVE  
COUNCIL ACTION SUMMARY

INITIATED: Village Attorney DATE: October 9, 2018  
(Name)

RECOMMENDATION FROM: \_\_\_\_\_ FILE REF: \_\_\_\_\_  
(Board or Department)

**NATURE OF ACTION:**

- Ordinance
- Resolution
- Motion
- Other

**STEPS NEEDED TO IMPLEMENT ACTION:**

Motion to Adopt "AN ORDINANCE AMENDING CERTAIN STORMWATER PROVISIONS", as presented.



**SUMMARY OF ITEM:**

Adoption of the attached ordinance shall amend certain stormwater provisions effective January 1, 2019.

**RECORD OF ACTION TAKEN:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE AMENDING CERTAIN  
STORMWATER PROVISIONS**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by shading/underline; deletions by ~~strikeout~~):

**Section 1. That Section 26.301 is hereby amended to read as follows:**

**26.301 Definitions.**

Within the context of this Ordinance, the following words and terms shall have the meanings set forth except where otherwise specifically indicated. Words and terms not defined shall have the meaning indicated by common dictionary definition.

**Accessory Structure.** A structure which is on the same parcel of property as a principal structure also referred to as an appurtenant structure, and;

- (a) is subordinate to and serves a principal structure; and,
- (b) is subordinate in area, extent, and purpose to the principal structure; and,
- (c) contributes to the comfort, convenience, or necessity of occupants of the principal structure.

**Administrator.** The person designated by the Village Manager to administer the implementation and enforcement of this Ordinance.

**Adverse Hydraulic Impact.** An increase of 0.10' or more to the modeled flood profile for a given storm event due to a proposed development activity.

**Alternatives Analysis.** The process of comparing and evaluating two or more courses of action of the various technical aspects of a development with the intent of selecting the action that best meets the stated Basic Development Purpose, while minimizing environmental effects and costs. A practicable alternatives study should consider possible alternative sites, a reduction in the scale of the development and rearrangement of the proposed facilities. This study assesses actions such as fill site locations, partial and full avoidance of habitats, restoration and enhancement of habitats and development economics.

**Applicable Engineering Practice.** Procedures, methods, or materials recommended in standard engineering textbooks or references as suitable for the intended purpose.

**Applicant.** A person applying for a Stormwater Management Permit, which person must be either the owner or the developer of the land specified in the application.

**Appropriate Use.** The only uses of the regulatory floodway that may be considered for a Stormwater Management Permit.

**Authorization.** A notice issued by the County to the Village that those aspects submitted to the County for review have been found to be in compliance with this Ordinance.

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**Base Flood.** The flood having a one percent probability of being equaled or exceeded in a given year. It is also known as the 1% chance or 100-year flood. It has been adopted by the NFIP as the basis for mapping, insurance rating, and regulating new construction. Within an LPDA it is the elevation as established by the WIIP or as approved by the Administrator.

**Base Flood Elevation (BFE).** The height of the base flood in relation to the North American Vertical Datum of 1988 (NAVD 88).

**Basic Development Purpose.** The fundamental, essential function of the proposed activity.

**Best Management Practices (BMPs).** Design, construction, and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volume, prevent erosion, and capture pollutants.

**Buffer.** The predominately vegetated area with a defined width adjacent to those areas that meet the definition of wetland and waters of DuPage for the purpose of eliminating or minimizing adverse impacts to those areas. Buffer may function to:

- reduce flood flow rates, velocity and volume,
- promote bank stability, filter sediment, nutrients and other pollutants,
- insulate and moderate daily water temperatures,
- promote groundwater infiltration,
- provide habitat corridors for aquatic and terrestrial fauna and flora.

**Building.** A structure that is constructed or erected partially or wholly above ground and is enclosed by walls and a roof. The term "building" includes manufactured homes and includes both the above-ground and the below-ground portions of the structure. Free standing signs or structures, such as kiosks are not considered to be buildings regulated in this Ordinance.

**Channel.** Any river, stream, creek, brook, branch, natural or artificial depression, ponded area, lake, flowage, slough, ditch, conduit, culvert, gully, ravine, swale, wash, or natural or man-made drainageway, in or into which surface or groundwater flows, either perennially or intermittently.

**Committee.** See Stormwater Committee.

**Compensatory Storage.** An excavated hydrologically and hydraulically equivalent volume of storage created to offset the loss of existing flood storage.

**CLOMA.** A Conditional Letter of Map Amendment. A FEMA comment letter on a development proposed to be located in, and affecting only that portion of, the area of flood plain outside the regulatory floodway and having no impact on the existing regulatory floodway or base flood elevations.

**CLOMR.** A Conditional Letter of Map Revision. A letter that indicates that FEMA will revise base flood elevations, flood insurance rate zones, flood boundaries, or floodways as shown on an effective FIRM or FBFM, after the record drawings are submitted and approved.

**County.** The County of DuPage, Illinois.

**Critical Duration.** The duration of a storm event that results in the greatest peak runoff.

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**Critical Wetlands.** Wetlands of the highest value by virtue of one or more high ranking characteristics that result in a uniquely valuable environment.

**Dam.** Any obstruction, wall, embankment, or barrier, together with any abutments and appurtenant works, constructed to store or direct water or to create a pool (not including underground water storage tanks).

**Department.** The DuPage County Department of Economic Development and Planning, or successor department or agency.

**Developer.** Any person who undertakes development or certifies ~~permits~~ development on such person's behalf.

**Development.** Any activity, excavation or fill, alteration, removal of vegetation, subdivision, change in land use, or practice, undertaken by private or public entities that affects the discharge of stormwater; or any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials in flood plain, flood way, wetland, waters or buffer areas. The term "development" does not include maintenance.

**Development Site.** The contiguous parcels of land under the Ownership or Control of the land owner or developer who is making Application for a Stormwater Management Permit. When the development includes subdivision of a parcel, the development site includes all land prior to subdivision. When the owner or developer controls only a portion of a larger development which has already been constructed, the Administrator may consider the larger, previously developed site as the "development site" if it was developed under a Stormwater Management Permit issued after February 15, 1992.

**Director.** The DuPage County Director of Stormwater Management or his or her designee. The Director of Stormwater Management shall be a Professional Engineer.

**Direct Impact.** Physical impact within wetland, waters or buffer.

**Drainage Control Map.** The Administrator shall prepare, and as necessary update maps, listings and other information, to be collectively known as the Drainage Control Map, setting forth regulatory flood plains and known Localized Poor Drainage Areas within the Village. The Drainage Control Map, as well as any proposed amendments, shall be submitted to the Oversight Committee for review and approval.

**Dry Land.** Land that is not a waters of the DuPage, which does not contain hydric soil, or can be shown through a review of historic aerial photos spanning at least 4 decades leading up to development that an area in question did not contain wetland area, but for an incidental construction activity that caused the area to become wet.

**Elevation Certificates.** A form published by FEMA, or its equivalent, that is used to certify the base flood elevation and the lowest elevation of usable space to which a building has been constructed.

**Environmental Scientist:** A professional with a four-year degree in an earth or life science curriculum and four years of professional experience in which the scientist has spent more than 50% of their work time on wetland/environmental related tasks with an emphasis on wetland delineation, ecology, restoration and botany.

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**FBFM.** A Flood Boundary and Floodway Map. A flood plain management map issued by FEMA that depicts, based on detailed analysis, the boundaries of the base flood, the two tenth percent (0.2%) probability flood, and the floodway.

**FEMA.** The Federal Emergency Management Agency.

**FEMA Map Change.** Any one or more of the following: CLOMR, LOMR, LOMA, CLOMR-F, LOMR-F and physical map changes and other designations of map change as developed under the NFIP.

**FHBM.** A Flood Hazard Boundary Map. An official map of a community, issued by FEMA, on which the boundaries of the flood, mudslide or mudflow, or related erosion areas having special hazards have been designated as Zones A, M, or E.

**Filter Barrier.** A temporary barrier installed below disturbed areas to intercept and retain sediment.

**Final Stabilization.** A condition when all soil disturbing activities at a site has been completed and a uniform, evenly distributed perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

**FIRM.** A Flood Insurance Rate Map. A map issued by FEMA that is an official community map, on which map FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. This map may or may not depict floodways.

**FIS.** Flood Insurance Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

**Flood or Flooding.** A general and temporary condition of partial or complete inundation of normally dry land areas from the unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Plain.** The area typically adjacent to and including a body of water where ground surface elevations are at or below a specified flood elevation.

**Floodproof.** Additions, changes, or adjustments to structures or property that prevent the entry of flood water in order to protect property from flood damage.

**Floodproofing Certificate.** A form published by FEMA that is used to certify that a structure is floodproofed to a minimum one foot above the base flood elevation.

**Flood Protection Elevation (FPE).** The base flood elevation plus three (3) feet of freeboard. If an approved FEQ watershed plan model produces a higher elevation than the regulatory BFE, the FPE shall be the FEQ flood of record elevation plus one (1) foot of freeboard. For detached garages and accessory buildings the FPE is the base flood elevation plus one (1) foot of freeboard.

**Floodway.** The channel and that portion of the flood plain adjacent to a stream or watercourse that is needed to convey the base flood without cumulatively increasing the water surface elevation more than 0.1 feet.

**Floodway Conveyance.** The measure of the flow carrying capacity of the floodway section and is defined using Manning's equation as,

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$K = \frac{1.49}{n} AR^{2/3}$  where "n" is Manning's roughness factor,  
 "A" is the effective area of the cross-section, and "R" is ratio of the wetted area to the wetted perimeter.

**Floristic Quality Index (FQI).** A quantitative measure to determine the quality of a plant community as calculated by the methodology contained in Plants of the Chicago Region (Swink, F. and G. Wilhelm. The Morton Arboretum, Lisle, Illinois).

**Hydrology.** The science of the behavior of water, including its dynamics, composition, and distribution in the atmosphere, on the surface of the earth, and underground.

**IDNR-OWR.** Illinois Department of Natural Resources - Office of Water Resources.

**IEPA.** Illinois Environmental Protection Agency.

**Indirect Wetland Impact.** A change in hydraulics or hydrology that causes a change in plant community that reduces or eliminates wetland function without directly filling or excavating wetland.

**Impervious Area.** Land cover that is, including, but not limited to, non-porous asphalt or asphalt sealants, non-porous concrete, roofing materials except planted rooftops designed to reduce runoff, and gravel surfaces used as roadways, driveways or parking lots. Graveled surfaces with high porosity used for storage of materials and wood decks may be counted as only 60% impervious for purpose of Stormwater Management Calculation. Ponded water shall be considered impervious area (at its normal water elevation), but vegetated wetlands or constructed wetland basins shall not be considered impervious area. The impervious area of a development site pre-development is the maximum extent of the impervious surfaces that existed on the development site at the same time in any of the 3 -years pre-dating the date of the application.

**Interim Watershed Plan.** A portion of a watershed plan adopted by the County Board that does not yet contain all of the elements in Chapter 3 of the Plan.

**Lake.** A natural or artificial body of water encompassing an area of two or more acres that retains water throughout the year.

**Land Disturbing Activities.** Any manmade change to improved or unimproved real estate including, but not limited to, construction of or improvements to buildings or other structures, filling, grading, paving, excavating or demolition of buildings, structures or pavement.

**Land Surveyor.** A person licensed under the laws of the State of Illinois to practice land surveying.

**Letter of Permission (LOP).** A request for approval to proceed with an action that is believed to have met certain specified criteria as defined within the Ordinance.

**Localized Poor Drainage Area (LPDA):** An area, determined to meet the criteria established in Section 26.1302 of this Ordinance and shown on the Drainage Control Map, which, based on historical information and generally accepted engineering practices and principles, has poor or otherwise inadequate drainage resulting in periods of flooding.

**LOMA.** A Letter of Map Amendment. The official determination by FEMA that a specific structure is not in a regulatory flood plain. A LOMA amends the effective FHBM, FBFM, or FIRM.

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**LOMC.** A Letter of Map Change. A Letter of Map Amendment or a Letter of Map Revision.

**LOMR.** A Letter of Map Revision. A letter from FEMA that revises base flood elevations, flood insurance rate zones, flood boundaries, or floodway as shown on an effective FHBM, FBFM, or FIRM.

**Lowest Floor.** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usage solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of the *Code of Federal Regulations (CFR) 44, Part 60.3*.

**Maintenance.** The selective removal of woody material and accumulated debris from, or repairs to, a stormwater facility so that such facility will perform the functions for which it was designed and constructed. Partial reconstruction or any resurfacing of existing roadways, walkways, trails and bicycle routes will be considered a form of maintenance.

**Major Residential Addition.** An addition to an existing detached or attached dwelling unit that expands the footprint of the dwelling by 400 sq. ft or more, excluding front porches, stoops, decks and patios.

**Major Stormwater System.** That portion of a stormwater facility needed to store and convey flows beyond the capacity of the minor stormwater system.

**Manufactured Home.** A building, transportable in one or more sections, that is built on a permanent chassis and is designated for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for more than 180 consecutive days.

**Minor Development.** The following parameters define Minor Development. The area proposed to be disturbed by the development activities can be defined and limited in the field to three acres or less, and;

- (i) Does not involve any work within a wetland, buffer or within 100 feet of a wetland boundary;

and

- (ii) Does not involve any work within a regulatory flood plain or LPDA; and
- (iii) Does not involve 2,500 square feet or more of net new impervious area.

A development may also qualify as minor, with the prior concurrence of the Administrator if it exceeds 2,500 square feet of net new impervious area but does not meet the thresholds for providing site runoff storage

**Minor Stormwater System.** That portion of a stormwater facility consisting of street gutters, storm sewers, small open channels, swales, and similar facilities designed to convey runoff from the 10-year flood event or less.

**Mitigation.** Measures taken to offset negative impacts by development to wetland, buffer or flood plain areas. When a development unavoidably requires impact or loss of natural resources, that impact must be offset (compensated or mitigated) by replacing or providing substitute resources or environments. Mitigation shall take into consideration functions wetlands and buffers may provide.

**Native Vegetation.** Plants indigenous to northeastern Illinois as defined within *Plants of the Chicago Region* (Swink and Wilhelm. The Morton Arboretum, Lisle, Illinois).

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**Natural Areas Restoration Development.** A development for which the basic development purpose is the restoration or creation of natural areas including streambank or shoreline restoration.

**Net New Impervious Area.** The difference between the Impervious Areas associated with an application for a Stormwater Management Permit, and the Impervious Area existing on the pre-development site.

**New Construction.** For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and included any subsequent improvements to such structures. For flood plain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of the flood plain management regulation adopted by a community and includes any subsequent improvements to such structures.

**New Impervious Areas.** Impervious areas constructed under the set of plans associated with an application for Stormwater Management Permit.

**New Manufactured Home Park.** A manufactured home park for which the construction of facilities for servicing homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of flood plain management regulation adopted by a community.

**New Single Family Residential Development.** A development of an attached or detached dwelling unit.

**NFIP.** The National Flood Insurance Program. The requirements of the NFIP are codified in Title 44 of the Code of Federal Regulations, Subchapter B.

**NRCS.** The United States Department of Agriculture, Natural Resources Conservation Service.

**Open Space Development.** Developments which create only incidental amounts of impervious area, such as trails, picnic shelters or playgrounds, involve grading and vegetation removal but do not alter significantly the pattern of stormwater runoff compared to the pre-development site. Open space developments are limited to 20% impervious coverage in the With-Development Site condition.

**Ordinary High Water Mark (OHWM).** The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank (scour line), shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Oversight Committee.** The Downers Grove Stormwater and Flood Plain Oversight Committee.

**OWR.** The Illinois Department of Natural Resources, Office of Water Resources.

**Parcel.** Contiguous land under single ownership or control.

**Performance Standards.** A set of criteria which a wetland buffer natural areas development must meet in order to obtain approval as outlined in a Stormwater Management Permit.

**Permanent Wetland Impact.** The permanent conversion of wetland to non-wetland through direct or indirect activities.

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**Permit.** A statement that a proposed development meets the requirements of this Ordinance.

**Person.** Any individual, partnership, firm, school district, company, corporation, association, joint stock company, trust, estate, unit of local government, special taxing district, public utility, political subdivision, state agency, or any other legal entity, or owner, or any legal representative, agent, or assign thereof.

**Plan.** The DuPage County Stormwater Management Plan, adopted by the DuPage County Board in September 1989, as amended from time to time.

**Post Construction BMPs (PCBMPs).** Features or infrastructure permanently installed onsite to treat stormwater runoff for pollutants of concern and to reduce runoff volume, following construction, for the life of the development.

**Practicable Alternative.** A development that is available and capable of being completed after taking into consideration cost, existing technology, and logistics in light of the overall basic development purpose. A study of practicable alternatives should consider possible alternative sites, a reduction in the scale of the development and rearrangement of the proposed facilities. This study assesses actions such as fill site locations, partial and full avoidance of habitats, and restoration and enhancement of habitats and development economics. See also **Alternatives Analysis**.

**Pre-Development Site.** On the date of application, the Pre-Development site consists of those existing site features that were either permitted or did not require permits at the time of their construction, or were constructed prior to February 15, 1992. Specifically, such features as pervious and impervious (paved or roof) surfaces, and existing drainage facilities, as well as Wetlands, flood plains/floodways, LPDAs and buffers are important pre-development site features.

**Professional Engineer.** A person licensed under the laws of the State of Illinois to practice professional engineering.

**Professional Engineering.** The application of science to the design of engineering systems and facilities, using the knowledge, skills, ability, and professional judgment developed through professional engineering education, training, and experience.

**Public Flood Easement.** An easement acceptable to the appropriate jurisdictional body that meets the regulation of the OWR, the Department, and the community, that provides legal assurances that all areas subject to flooding in the created backwater of the development will remain open to allow flooding.

**Record Drawings.** Drawings prepared, signed, and sealed by a Professional Engineer or land surveyor representing the final "as-built" record of the actual in-place elevations, location of structures, and topography.

**Recreational Vehicle.** Any camping trailer, motor home, mini-motor home, travel trailer, truck camper and van camper as those terms are defined in the Illinois Motor Vehicle Code, or any other habitable vehicle used primarily for recreational purposes.

**Regulatory Flood Map (RFM).** The flood plain map panels maintained and published by DuPage County which reflect the current effective flood zone boundaries as shown on the FIRM and all effective Letters of Map Change issued by FEMA.



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**Regulatory Flood Plain.** The flood plain as determined by the base flood elevation used as the basis for regulation in this Ordinance.

**Regulatory Floodway.** The floodway that is used as the basis for regulation in this Ordinance.

**Regulatory Wetlands.** All wetlands other than critical wetlands.

**Repetitive Loss.** Flood related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

**Residential Stormwater Storage.** A system constructed to temporarily store stormwater for New Single Family Residential Developments and Major Residential Additions.

**Riparian Environment:** Land bordering a waterway that provides habitat or amenities dependent on the proximity to water.

**Roadway Development.** A development on an essentially linear property holding including easements, not a part of a larger development project involving adjacent land holdings, and for the purpose of building a new roadway, expanding the impervious footprint of an existing roadway, or completely reconstructing an existing roadway.

**Runoff.** The waters derived from melting snow or rain falling within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin.

**Sediment Basin.** Settling ponds with pipe outlet, which have both a permanent pool (dead storage) and additional volume (live and sediment storage) component, to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

**Sediment Trap.** A small, temporary ponding basin formed by the construction of an embankment or excavated basin to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

**Silt Fence.** A temporary filter barrier of entrenched geotextile fabric (filter fabric) stretched across and attached to supporting posts.

**Soil Scientist.** A person with a four-year degree in which the core curriculum included course work in a minimum of two of the following fields: soil science, pedology, edaphology, and geomorphology, and which person has a minimum of two years of field experience in classifying soils.

**Special Flood Hazard Area (SFHA).** An area having special flood, mudslide or mudflow, or flood-related erosion hazards, and which area is shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

**Start of Construction.** The date the permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the permit date. The actual start date includes the first day of any land preparation, including clearing, grading, filling, or excavation. For substantial improvements, the actual start of construction means the first

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alteration of any wall, ceiling, floor, or other structural part of a building whether or not that alteration affects the external dimensions of the building.

**Stormwater Committee.** The Stormwater Management Planning Committee of the DuPage County Board, authorized by Public Act 85-905.

**Stormwater Facility.** All ditches, channels, conduits, bridges, culverts, levees, ponds, natural and man-made impoundments, field tiles, swales, sewers, BMPS or other structures or measures which serve as a means of draining surface and subsurface water from land.

**Stormwater Management Permit.** A permit established by this Ordinance; and issued by the Village signifying acceptance of measures identified for proposed development to comply with this Ordinance and the Plan.

**Structure.** The term “structure” includes, without limitation: buildings, manufactured homes, tanks and dams.

**Structural Engineer.** A person licensed under the laws of the State of Illinois as a structural engineer.

**Substantial Damage.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**Substantial Improvement.** Any reconstruction, rehabilitation, addition, or improvement of a structure taking place during a 10-year period in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. "Substantial Improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. This term includes structures which have incurred repetitive loss or substantial damage, regardless of the actual work done. The term does not, however, include either: any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or any alteration of a “historic structure” listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the structure’s continued designation as a historic structure.

**Temporary Wetland Impact.** A wetland impact that would result in a short-term loss of wetland function. Temporary wetland impacts do not result in a permanent conversion of wetland to non-wetland. Temporary impacts do not include relocation of wetland, or conversion of a vegetated community to open water, unless the conversion is part of an overall wetland restoration/creation program that is submitted for review and approved. Additionally, for the impact to be considered temporary, wetland soil profiles shall be able to be restored to a similar pre-disturbance condition and elevation, vegetative communities shall have the capability of being restored to same or higher quality, function; and the restoration must occur within one year of the disturbance.

**Total Impervious Area.** The sum of the impervious area on a site.

**Usable Space.** Space used for dwelling, storage, utilities, or other beneficial purposes, including without limitation basements.

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**USACE.** United States Army Corps of Engineers.

**USEPA.** United States Environmental Protection Agency.

**Variance.** An Authorization recommended by the Oversight Committee, and granted by the Village Council, that varies certain requirements of this Ordinance in a manner in harmony with the application of the Ordinance's general purpose and intent, which variance shall be granted only in a case where there are practical difficulties or particular hardships.

**Violation.** Failure of a structure or other development to be fully compliant with the regulations identified by Ordinance.

**Water and Sewer Improvement Development.** A development to construct, replace or upgrade infrastructure to meet current IEPA requirements for public water supply or pollution control (water or sewer system improvements). This definition does not include buildings, substations, pads, parking lots or other associated utility support facilities.

**Water Quality Best Management Practices Technical Guidance.** This document is a standalone guidance on file with DuPage County. The Guidance was published in March 2008.

**Watershed.** All land area drained by, or contributing water to, the same stream, lake, or stormwater facility.

**Watershed Basin Committee.** A technical committee established within a watershed planning area.

**Watershed Benefit.** A decrease in flood elevations or flood damages or an improvement in water quality, upstream or downstream of the development site.

**WIIP.** The Watershed Infrastructure Improvement Plan as approved by the Village Council in September 2007, and all subsequent revisions, which identifies areas in the Village where drainage and flooding issues exist and recommends specific solutions.

**Watershed Plan.** A plan adopted by the County for stormwater management within a watershed consistent with the requirements in Chapter 3 of the Plan.

**Watershed Planning Area.** That area considered in a specific watershed plan, adopted as part of the Plan.

**Watershed Plan Model.** The hydrologic and hydraulic model meeting the standards of the Plan and used in developing a watershed plan.

**Waters of DuPage.** All waters such as lakes, rivers, streams (including intermittent streams), mudflats, wetlands, sloughs, wet meadows, or natural ponds.

Tributaries of waters identified above.

For clarification, waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not Waters of DuPage.

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The following are generally not considered to be Waters of DuPage. However, the Administrator, reserves the right on a case-by-case basis to determine that a particular waterbody within these categories of waters is a Waters of DuPage.

- \_ Drainage, irrigation and roadside ditches excavated on dry land.
- \_ Artificially irrigated areas that would revert to upland if the irrigation ceased.
- \_ Artificial lakes, ponds or **wetlands** created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stormwater storage, stock watering, irrigation, settling basins, or sediment traps.
- \_ Artificial bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
- \_ Water filled depressions created in dry land incidental to construction activity and pits or quarries excavated in dry land for the purpose of obtaining fill, stone, aggregate, sand, or gravel unless and until the construction or excavation operation is abandoned for a period of 5 years or more and the resulting body of water meets the definition of waters of DuPage.

**Wetlands.** Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wetland Buffer:** Area within 50 feet of a regulatory wetland boundary or 100 feet of a critical wetland boundary.

**Wetland Impact.** Development affecting the long term function of any wetland.

**With-Development Site.** The site features illustrated on the final certified plans for a development, including unchanged areas or facilities of the pre-development site.

**Section 2. That Section 26.401 is hereby amended to read as follows:**

**26.401 Powers and Duties.**

The Oversight Committee shall have the following powers:

- A. To hear any appeal from any ~~order~~, requirement, application, interpretation, ~~decision~~ or determination made by the Administrator in the enforcement of this Ordinance or from the inclusion therein of any special condition.
- B. To hold public hearings and make decisions or recommendations regarding appeals, proposed variations, or proposed amendments to this Ordinance.
- C. To review and recommend fees to be charged under this Ordinance.
- D. To perform such other duties and functions as the Village Council may from time to time direct.

**Section 3. That Section 26.610 is hereby amended to read as follows:**

**26.610 Permit Application Requirements and Submittals.**

The specific applicable technical requirements and the extent of documentation required to be submitted may vary depending on existing conditions of the development site. The Applicant shall combine the

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separate "submittals" referenced in each article into a single application package of materials. Unless superseded by application under either a General Certification or a Letter of Permission, or the Administrator specifically allows a modification of the submittal requirements in writing, the following shall guide the determination that an application for Stormwater Management Permit is complete. All site improvements required as part of a permit must be properly maintained at all times and shall not be removed or modified without written authorization from the Village. Failure to maintain the required improvements shall be deemed a violation of this Ordinance.

A. Stormwater Submittal. All developments requiring a Stormwater Management Permit are required to submit the information required in (Section 26.700.A & B). The requirement for Record Drawings (Section 26.700.BC) applies to all developments that construct stormwater facilities, or include wetland, buffer or flood plain onsite. Unless the development fits the definition of Minor Development, the plans and calculations listed in Section 26.700.C will also be required (as relevant to the specific development).

B. Maintenance Plan. When the development includes construction of a Site Runoff Storage Facility or Post Construction Best Management Practices, a maintenance plan specifying tasks and frequency shall be submitted.

C. The provisions of Section 26.801 shall apply to all developments except:

1. Developments classified as Minor Developments; or
2. Developments which do not include site stormwater storage facilities and which do not include any Best Management Practices with a design drainage area greater than 1-acre.

D. Performance Security. Performance Security in accordance with Section 26.800 may be combined into a single instrument and is required as follows.

1. Development Security or a Stormwater Bond, in accordance with Section 26.800.B, is required for all developments requiring a Stormwater Management Permit.
2. Erosion and Sediment Control Security in accordance with Section 26.800.C is required for any development disturbing more than 1-acre, or which disturbs the bed and banks of a channel draining more than 100-acres, or when an Erosion and Sediment Control Plan is required because of impact to wetlands, buffers or flood plains.
3. A Natural Area, Wetland and Buffer Mitigation Area Security shall be posted per Section 26.800.D. Whenever a natural area is being restored or a wetland of buffer is impacted and mitigated, unless mitigation is provided by fee-in-lieu.

E. Soil Erosion and Sediment Control. All developments must provide both temporary and permanent Soil Erosion and Sediment Control; however, plans for these measures must be submitted for review only where the development is required to obtain a Stormwater Management Permit (Section 26.600). Developments required to make application may obtain a Letter of Permission (Section 26.601), even if it is not a Minor Development, as long as no other aspect of the development requires review under Articles X, XI, XIII or XIV. All other applications shall include the following based on area of land disturbance of the proposed development:

1. If the land disturbance is less than 1 acre and does not disturb the bed and banks of a channel draining more than 100-acres, and the development does not involve impact to buffer or wetland or flood plain, and is not part of a larger common plan, then the submittal shall be per Section 26.703.B.
2. If the land disturbance is one 1-acre or greater or disturbs the bed or banks of a channel draining more than 100-acres, or the development includes impact to buffers or wetlands or flood plains, then the requirements of Sections 26.703.C and 26.703.D shall apply.

F. Post Construction Best Management Practices. When the impervious coverage of the development site is increased by seven hundred (700) square feet or more compared to the pre-development site, then PCBMPs, designed in accordance with Section 26.1000 through 26.1003, are required and submittals, in accordance with Section 26.702, are required with the Application, unless one of the exceptions or exclusions listed in Section 26.1000 applies.

G. Flood Plains, LPDAs and Floodways. All developments shall check the requirements of Section

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26.1301 to determine if a flood plain or LPDA exists on a development site. If a flood plain or LPDA does exist on the development site, a BFE shall be established as outlined in Section 26.1301C and shall be drawn on the site topographic map. If the proposed work is outside of the BFE, there shall be no additional requirements from Article XIII that need to be met. Applicants shall determine if floodway exists following Section 26.1301.D. For developments that involve work within the flood plain or, where there is floodway within the disturbed area, the flood plain and floodway shall be delineated on the site plan.

1. For Developments within the flood plain, document that Section 26.1302 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans.
2. For Developments within the floodway, document that Section 26.1303 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans per Section 26.704.

H. Wetlands. Stormwater Management Permits are required for developments where the area being disturbed, or developed, is within one hundred (100) feet of a wetland located either on-site or off-site. The application shall include the following.

1. A wetland delineation and report will be required unless the wetland is determined to be greater than 100 feet away from the development's limit of disturbance, and Section 26.1400.A and 26.1400.B is applied with the concurrence of the Administrator.
2. If the development's proposed limit of disturbance is within one hundred (100) feet of a wetland, then,
  - a. A wetland delineation and report will be required Section 26.1400, unless the wetland has clearly defined boundaries and there are no proposed wetland or buffer direct impacts or indirect wetland hydrologic impacts that exceed the thresholds found in Section 26.1402.
  - b. If there are direct impacts to the wetland, then the wetland submittal in accordance with Section 26.701 will be required.
  - c. If the thresholds development will cause an indirect impact to a wetland, an indirect impact analysis shall be included in the Wetland Submittal.
  - d. If the development has a direct or indirect permanent wetland impact a hydrologic analysis of the mitigation area (Section 26.1403.L) and a maintenance and monitoring plan (Section 26.1403.M) are required to be submitted, unless Fee in Lieu of mitigation is provided.

I. Buffers. Direct impacts to buffers (Section 26.1500) will require a Buffer Submittal in accordance with Section 26.701.

**Section 4. That Section 26.700SEC. is hereby amended to read as follows:**

**26.700SEC. Stormwater Submittals.**

A. Drainage Plan. All developments that include between five hundred (500) square feet and one thousand five hundred (1,500) square feet of land disturbing activities shall require the submittal and approval of a drainage plan indicating the direction of existing and proposed stormwater flow on the site. If the development site is located within or adjacent to a flood plain, LPDA or wetland, a Grading and Site Restoration Plan may be required. Other information, as necessary and as determined by the Administrator, may be required to verify compliance with this ordinance.

B. Grading and Site Restoration Plan. All developments that include more than one thousand five hundred (1,500) square feet of land disturbing activities shall require the submittal and approval of a grading and site restoration plan. The Administrator, may approve, in writing, an application without some or all of the following items based on the extent and complexity of the development or the development is eligible for permit under a General Certification or Letter of Permission. The following constitutes a Grading and

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## Site Restoration Plan submittal:

1. A standard engineering scaled drawing that includes or addresses:
  - a. The name and legal address of the applicant and of the owner of the land.
  - b. The common address and legal description of the site where the development will take place.
  - c. Site drainage showing the existing and proposed grades for a particular parcel and for adjoining properties (affected) with a minimum of one foot (1') contour intervals in sufficient detail to clearly indicate drainage flows.
  - d. Extent of existing impervious area, proposed developed impervious area, itemized calculations of the total net new impervious area, and extent of area to be disturbed in the construction of the development.
  - e. Cross-sections of drainage swales, including one at each window well, as applicable.
  - f. Foundation elevation, including the top of foundation and any openings below top of the foundation on all new or existing structures or portions thereof.
  - g. Any proposed PCBMPs, minor and major stormwater facilities using topography and spot elevations and depicting any offsite upstream drainage area and the characteristics of the downstream facilities receiving discharge from the development.
  - h. Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles
  - i. The parcel drainage shall be designed to flow away from the top of foundations. Storm water being directed to the side yard of the parcel shall be directed into a formed drainage swale, having a minimum slope of two percent (2%) and a maximum slope of five percent (5%) where practical. In the event that conditions dictate that some parts of the lot be higher than the structure foundation, the grading must show specific drainage configurations for the parcel specifying that all drainage is to be directed to flow away from the foundation. At a minimum, spot grades shall be shown along the foundation and at all window well, their rims and ~~and~~-adjacent grade. Cross-section shall be provided for all swales, at a minimum at all window wells or other constrictions. A note shall be added that all swales shall be constructed of sod, subject to Village approval.
  - j. Construction and work such as walkways, driveways, parking lots, landscaping or any structure shall be installed so that the construction of same will not interfere with drainage. All sidewalks, driveways, parking lots, patios and other flat work shall be at an elevation relative to the foundation wall so that water will drain away from the structure on all sides and off the lot in a manner which will provide reasonable freedom from erosion and permanently pocketed surface water.
  - k. The flow from off-site tributary areas that are tributary to an intermittent stream or overflow route that must pass through the parcel must be identified on the grading plan and must be designed in such a way to adequately handle the flow of all water to accommodate a 100-year storm frequency.
  - l. All overflow routes for the 100-year storm and for accumulated storm water runoff from several lots or from off-site catchment areas must be clearly designated on the grading plan with the total width of the flow route contained within an easement for drainage purposes.
  - m. The location of, and direction of, the discharge of any sump pump, or downspout or other piped discharge onto the site from the subject property and from adjoining properties. The plan shall note if the discharge will splash to grade, or shall show the location, size and material of any associated piping. The plan shall also show a provision for splash blocks or other erosion control for discharges splashing to grade. The distance between the discharge and the property line shall be maximized and a Any piped discharge must

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~~terminate no closer than~~ drain across a minimum of twenty feet (20') ~~from the downstream property line and~~ of pervious surface prior to leaving the site or shall otherwise be mitigated. All piped discharge shall be directed towards the right-of-way to the extent site topography allows, unless otherwise approved by the Administrator. See Section 26.1100(h) for discharge mitigation requirements. ~~in accordance with Section 13.7.(f).~~

- n. The distance between the property and any regulatory floodplain or LPDA, including as necessary the base flood elevation.
  - o. Areas to be graded and prepared for seeding or sod shall indicate a minimum of four (4) inches of topsoil.
  - p. The following Erosion Control Notes shall be added to the site plan:
    - (1) The sediment and erosion control devices shall be functional before any land is disturbed on the site.
    - (2) Stockpiles of soil shall not be located within any drainageways, floodplains, wetlands, buffers or LPDAs.
    - (3) Sediment and erosion control shall be provided for any soil stockpile if it is to remain in place for more than three days including a double row of silt fence.
    - (4) Properties downstream from the site shall be protected from erosion if the volume, velocity, sediment load, or peak flow rates of stormwater runoff are temporarily increased during construction.
    - (5) Storm sewer inlets shall be protected with sediment trapping or filter control devices during construction.
    - (6) The surface of stripped areas shall be permanently or temporarily protected from soil erosion within ~~fifteen~~seven (7) days after final grade is reached. Stripped areas that will remain undisturbed for more than ~~fifteen~~seven (7) days after initial disturbance shall be protected from erosion.
    - (7) Water pumped or otherwise discharged from the site during construction dewatering shall be filtered.
    - (8) A stabilized construction entrance shall be provided to prevent the deposition of soil onto public or private roadways. Any soil reaching a public or private roadway shall be removed before the end of each workday.
    - (9) All temporary erosion control measures necessary to meet the requirements of the Village of Downers Grove Stormwater and Flood Plain Ordinance shall be kept operational and maintained continuously throughout the period of land disturbance until permanent sediment and erosion and control measures are operational.
  - q. Any additional information as necessary to show compliance with the Downers Grove Municipal Code, including the applicable Village of Downers Grove Standard Detail Drawings.
2. Affidavits signed by the land owner and the developer attesting to their understanding of the requirements of this Ordinance and their intent to comply therewith, including the submittal of a record drawing in accordance with Section 26.700.B; and
  3. A listing of all other required stormwater related permits, a brief description of how the other permits apply to the development, and when requested by the Administrator, complete copies of the applications for the permits; and
  4. A statement of opinion by a qualified professional either acknowledging or denying the presence of flood plain in accordance with Section 26.1301, wetlands in accordance with Section 26.1400, and buffers in accordance with Section 26.1500; and



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5. A statement from the applicant acknowledging that all stormwater submittals shall be made available for inspections and copying notwithstanding any exemption from inspection and copying for such materials under the Freedom of Information Act, upon the written request of either (1) the applicant, (2) any subsequent owner of the subject property, or (3) any governmental unit having planning or drainage jurisdiction within one and one half (1 and ½) mile of the subject property.

C. Record Drawings. For projects with a stormwater facility other than a PCBMP (as required in Section 26.1000), prior to the issuance of a building permit, the associated stormwater facilities must be completed, and a Record Drawing of such must be submitted for approval. The Record Drawing must depict the as-constructed size, rim and invert elevations of pipes, stormwater structures and culverts, and contours and flood storage volumes of all required basins of the major and minor stormwater systems.

After the completion of the Development, a complete set of Record Drawings must be submitted prior to the return of remaining securities or acceptance of public improvements. The following items must be included in the Record Drawings unless the Administrator, in writing, waives the requirements based on the extent and complexity of the development:

1. All plans and drawings shall be at standard engineering scale.
2. Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles.
3. An impervious area table listing all impervious areas or a drawing with all impervious areas labeled and totaled shall also be included on the As-Built drawings.
4. Calculations that establish the required site runoff storage volume along with calculations confirming that the proposed plan achieves either the site runoff storage or the modified site runoff storage.
5. Location and details for any required compensatory storage and supporting calculations.
6. Site drainage showing the as-built grades with a minimum of one foot (1') contour intervals in sufficient detail to clearly indicate drainage flows.
7. All boundaries of LPDAs, flood plain, wetlands and buffers shall be labeled.
8. Top of foundation elevations of all new structures and spot grades adjacent to the foundations of all new structures.
9. Stoops outside of doorways and window well locations, rim elevations, and the adjacent grade.
10. An accurate as-built location of and details for any PCBMPs, including location of all utilities.
11. Sump Pump discharge location, discharge path, and the location, size, and material of any associated piping.
12. Downspout location, discharge path, and the location, size, and material of any associated piping.
13. All existing and proposed improvements within the right-of-way, including sanitary and water mains and service locations.
14. An Elevation Certificate is required to be submitted for all additions and new construction within SFHA's or LPDA's.
15. A notice acknowledging the presence of on-site wetlands, buffers, flood plains and PCBMPs with draining areas one (1) acre or greater shall be recorded against the title of the property by the Village to alert all future owners and shall reference the stormwater management permit. All administrative and recording fees will be borne by the permit applicant as established in the Village User-Fee, License and Fine Schedule Regulation.

**Section 5. That Section 26.1001 is hereby amended to read as follows:**

**26.1001 Post Construction Best Management Practices Design Criteria.**

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- A. PCBMPs shall provide volume and pollutant control using one of the following practices:
1. Infiltration of 1.25 inches for all new impervious surfaces; or
  2. Native vegetated wetland bottom site runoff storage basin; or
  3. PCBMPs not constructed pursuant to Sections 26.1001A.1 or 26.1001A.2 shall be constructed in accordance with 26.1001C.
- B. Design criteria may be taken from the DuPage Appendix E Water Quality Best Management Practices Technical Guidance Manual or approved equivalent.
- C. If the practices listed under Sections 26.1001A.1 or 26.1001A.2 are not utilized, then volume control and pollutant control shall be provided separately for all new impervious surfaces in accordance with the following criteria:
1. The required volume control shall be calculated as the product of the new impervious area and a 1.25 inch rainfall event (New Impervious area in square feet x 1.25" x (1 ft/12")). No abstractions are taken on the rainfall depth.
  2. The volume calculated shall be subtracted from any volume of site runoff storage that is also required.
  - ~~3. PCBMPs shall be designed to drain within ninety-six (96) hours. A control structure or underdrain, may be used, provided that the draw down time is not less than between forty-eight (48) and 96 hours. On-site testing to ensure that the draw down time meets the requirements, and a report regarding the testing, must be submitted with the permit application.~~
  - ~~4. When a trench or other excavation is used, the expected void space (typically no greater than 36%) within the uniformly graded stone, sand or aggregate portion of the fill material may be included in the volume calculation. Silt sized particles (1/16 mm) or smaller may not be used to complete this calculation. The design shall incorporate measures to protect the void space from long term deposition of fine sediments. If testing is completed on samples of the proposed fill material which indicates a higher level of porosity, the applicant may submit the analysis completed on the material along with the storage calculations.~~
  - ~~5. The bottom/invert of the trench shall be set above the seasonally high water table.~~
  6. A piped overflow connection from the PCBMP to the Village stormwater management system (ditch or storm sewer) must be provided, unless otherwise approved in writing by the Stormwater Administrator.
  7. Provide at least one inspection well and a surface overflow (can be combined).
  8. PCBMPs shall be located at least ten feet (10') from all buildings that include basements or crawl spaces, including those on adjacent properties.
  9. PCBMPs must be located at least five feet (5') from all property lines.
  10. Sump pump discharges shall not be directly connected to the required PCBMP, unless otherwise approved in writing by the Stormwater Administrator and extra volume is provided for in accordance with 26.1100(h).
  11. Downspouts shall not tie directly into the required PCBMP, unless otherwise approved in writing by the Stormwater Administrator. They must be directed overland to the PCBMP.
  12. Drywells shall be located in a depressed area to promote infiltration.

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13. If groundwater is encountered during construction, the bottom elevation of the drywell shall be raised above the estimated seasonal high water table. The length and width of the drywell shall be adjusted accordingly to maintain the required volume.

14. The PCBMP must be designed and located so the overflow does not result in a concentrated discharge that causes downstream erosion, and an adequate overflow path must be provided.

15. An inspection of any underground storage system is required prior to backfilling to verify dimensions, fabric placement and backfill material.

16. Prior to any other on-site construction or demolition, a construction fence must be installed around the perimeter of the PCBMP and shown on the site plan.

**GD.** A notice acknowledging the presence of a PCBMP and the responsibility to maintain the PCBMP shall be recorded against the title of the property by the Village to alert all future owners and shall reference the stormwater management permit. All administrative and recording fees will be borne by the permit applicant as established in the Village User-Fee, License and Fine Schedule Regulation.

**Section 6. That Section 26.1100SEC. is hereby amended to read as follows:**

**26.1100SEC. Site Runoff Conveyance Requirements.**

- A. Minor stormwater systems shall be sized to convey runoff from the tributary watershed under fully developed conditions consistent with the design requirements of the local jurisdiction.
- B. Major storm water systems shall be sized to carry the base flood without causing additional property damage.
- C. Design runoff rates shall be calculated by methodologies in general use for such purposes at the time of application. Stormwater facilities draining more than 5-acres shall use event hydrograph methods. The Administrator may specify certain design tools and methodologies to be used within the respective community.
- D. Any design runoff rate method shall use Illinois State Water Survey Bulletin 71 northeast sectional rainfall statistics, or for continuous simulations, the National Oceanic and Atmospheric Administration continuous rainfall record from 1949 to present at the Wheaton gage, and shall calculate flow from all tributary area upstream of the point of design. Facilities with a tributary area over 100-acres will be required to perform critical duration analysis and use the highest peak discharge for conveyance design, testing events up to a 24-hour duration.
- E. Maximum flow depths at the crown of a roadway or the edge of pavement at the high side of a super elevated roadway shall not exceed six inches during the base flood condition. This requirement does not apply to the at-grade repair, resurfacing or in-kind replacement of a roadway existing prior to the effective date of this Ordinance.
- F. Transfers of waters between the major planning watersheds shall be prohibited except when such transfers will not violate the provisions of Section 26.504A.
- G. Stormwater facilities for runoff upstream of flood protection facilities shall provide for conveyance or storage of flood waters without increased potential for damage to real or personal property during base flood conditions.
- H. Any discharge that results in standing water for a period of more than seventy-two (72) hours, causes the formation of ice and/or the creation of any other hazardous or unsafe condition will require mitigation. If mitigation includes connection to a stormwater system, storage will be required in the amount of twenty-five percent (25%) of the volume required in Section 26.1001 for the impervious foot print of the home and shall also meet all other requirements contained in Section 26.1001, except for the required

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pollutant control.

**Section 7. That Section 26.1108 is hereby added to read as follows:**

**26.1108 Residential Stormwater Storage.**

In addition to all other requirements of Chapter 26, all New Single Family Residential Developments and Major Residential Additions shall provide Residential Stormwater Storage in accordance with the following:

A. All sump pumps installed with a new foundation shall discharge into a fifty (50) cubic foot Residential Stormwater Storage system, in addition to any required PCBMP pursuant to Section 26.1001.

B.

<b>NET NEW IMPERVIOUS AREA</b>	<b>STORAGE VOLUME REQUIRED</b>
1 to 699 square feet	100 cubic feet
700 to 999 square feet	150 cubic feet + required PCBMP storage volume
1,000 to 1,999 square feet	200 cubic feet + required PCBMP storage volume
2,000 square feet or more	250 cubic feet + required PCBMP storage volume

C. All Residential Stormwater Storage shall be designed in accordance with Section 26.1001 Post Construction Best Management Practices Design Criteria, except for the required pollutant control. All cumulative storage requirements of this Ordinance may be combined into one system.

**Section 8. That Section 26.1702 is hereby amended to read as follows:**

**26.1702 Notice of Violations and Citations.**

A. Whenever the Administrator determines that a violation of the Ordinance exists, prior to the issuance of a citation, the Administrator shall issue a Notice of Violation in any of the following manner:

1. By posting a copy on the subject property in a conspicuous place, or
2. By personally delivering or mailing a copy to the person, firm, or corporation responsible for the unlawful act or omission or condition which forms the basis for the violation, or
3. By personally delivering or mailing a copy to any adult who resides at, occupies, uses, leases, manages or maintains the property on which the violation is located, or
4. By personally delivering or mailing a copy Notice of Violation to any owner in title to the property on which the violation is located and mailed to the "owner of record" as indicated on the latest Tax Assessor's records to the last address to which a tax bill was mailed.

B. If a notice, or order, is issued in accordance with Section 26.1702.A or if the party to whom the Notice of Violation was issued was in accordance with is not also the property owner, a copy of the notice shall also be mailed to the "owner of record" as indicated on the latest Tax Assessor's records at the last address to which a tax bill was mailed.

C. A Notice of Violation shall contain the following:

1. A brief statement setting forth the type and nature of the violation; and
2. The section, or sections, of the Ordinance violated and, if applicable, the identity of any ~~order,~~ permit, plan or statement of specifications violated; and
3. The date the violation was observed; and
4. The address and/or PIN of the property on which the violation was observed; and
5. A statement directing the discontinuance of the illegal action or condition and abatement of the violation; and

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6. ~~A statement informing the violator, and/or owner, that they may contest the Notice of Violation by requesting in writing and within fourteen (14) days of issuance of the notice, an administrative appeal; and~~
7. A statement informing the violator, and/or owner, that they ~~may~~**must** correct the violation within fourteen (14) days. A violator may remedy the violation by either;
- Correcting, abating or removing the violation, or the condition(s) which cause the violation, and has such remediation verified by an inspection; or
  - Applying to the Village for any necessary permit(s), or to revise or amend any previously issued permits, or revise or amend any previously approved plan, drawing or specifications, as applicable.
- ~~87.~~ A warning that if the violator fails to comply with the Ordinance and remedy the violation within the time specified the Village shall ~~issue a citation for the violation~~**institute appropriate legal proceedings against the violator.**
- ~~98.~~ A statement that the Ordinance authorizes fines of up to seven hundred fifty dollars (\$750.00), per day, for each day a violation remains uncorrected, plus additional court costs, which fines and costs may be assessed in addition to other remedies at law including a court order enjoining further violations and ordering the offender to cease, correct, repair, abate or otherwise remedy the offending condition.
- ~~D.C.~~ If a party to which a Notice of Violation has been issued requests an extension of time to comply with the Ordinance, or perform any act necessary to remedy a violation, the Administrator may allow an extension of time for such compliance or act, which extension shall not be more than forty five (45) days. ~~The Administrator shall not extend the period of time in which a party may request an administrative hearing~~
- ~~E.D.~~ The issuance of a Notice of Violation shall not be required as a condition of the Village commencing legal action to enforce a stop work order issued pursuant to Section 26.1706, or where the a-violation presents an imminent risk of harm to the health, life or safety of any person, or an injunctive suit brought pursuant to Section 26.1709.

**Section 9. That Section 26.1707 is hereby amended to read as follows:****26.1707 Fines**

- A. Any person who violates, disobeys, omits, neglects, or refuses to comply with, or who resists enforcement of, any provision of this Ordinance, or any condition in any permit issued pursuant to this Ordinance shall be subject to a fine not less than seventy-five dollars (\$75.00) nor in excess of seven-hundred fifty dollars (\$750.00) for each offense. Each calendar day a violation continues to exist shall constitute a separate offense.
- B. For the purposes of Section 26.1706, the owner, any occupant, the developer and/or any contractor doing development work on the land shall be jointly and severally liable for any violation of this Ordinance.
- C. The Oversight Committee, ~~shall~~**may** request the Village Attorney to prosecute such action ~~as a petty-offense pursuant to 730 ILCS 5/5-1-17 (1992); as hereafter amended; or according to other the~~ appropriate authority in law or in equity.

**Section 10. That Section 26.1800SEC. is hereby amended to read as follows:****26.1800SEC. Right to Appeal.**

- A. Any person directly aggrieved by any decision, ~~order~~, requirement, or determination of the Administrator made pursuant to an interpretation of this Ordinance shall have the right to appeal such action to the Oversight Committee; provided, however, that all decisions made by the Administrator

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pursuant to Article XVIII of this Ordinance shall be final and not appealable, except as otherwise specifically provided in this Article.

B. An appeal shall be based on a claim that the true intent of this Ordinance has been incorrectly interpreted or that the provisions of this Ordinance do not apply. Every applicant for an appeal shall notify the Oversight Committee in writing of the decision being appealed, which notice shall include a short, plain statement containing the ~~reasons~~basis ~~why the decision is being appealed~~for the appeal and how the applicant has been directly aggrieved by the action taken. Concurrently with the filing of an appeal, the applicant shall furnish the Village with a list of the names and addresses of the owners of record of the property which is the subject of such application; and, a list of all persons to whom the latest general real estate tax bills were sent for all property situated within two hundred and fifty (250) feet of the subject property; and a filing fee as set forth in Administrative Regulation entitled "User-Fee, License and Fine Schedule".

C. Upon receipt of such a notice of appeal, the Oversight Committee shall set a date for a public hearing before the Oversight Committee. Such public hearing shall commence not fewer than fourteen (14) days ~~not~~nor more than sixty (60) days after the date on which a properly prepared notice of appeal was received. The applicant shall be promptly notified of the public hearing date.

D. A public hearing shall be set, noticed, and conducted by the Oversight Committee in accordance with the provisions of Section 26.2000 of this Ordinance.

E. The Oversight Committee shall decide the appeal within sixty (60) days after the conclusion of the public hearing. All decisions on appeals shall be in writing and shall include a statement of the reasons for the decision. The failure of the Oversight Committee to act within sixty (60) days shall be deemed to be a decision denying the appeal.

F. A party may appeal the decision of the Oversight Committee to the Village Council by filing a notice thereof in the form required by Section 26.1800.B of this Ordinance with the Village Council within fourteen (14) days after the date of decision by the Oversight Committee. Failure to properly file such notice shall render final the decision of the Oversight Committee.

G. Within thirty-five (35) days after receipt of a properly prepared and filed notice of appeal, the Village Council shall without further hearing, affirm, reverse, or modify the decision of the Oversight Committee. The failure of the Village Council to act within thirty-five (35) days shall be deemed to be a final decision of that body denying the appeal and affirming the decision of the Oversight Committee.

H. The decision of the Village Council shall in all instances be considered a final decision.

**Section 11.** That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

**Section 12.** That this ordinance shall be in full force and effect January 1, 2019.

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Mayor

Passed:

Published:

Attest: \_\_\_\_\_

Village Clerk