

VILLAGE OF DOWNERS GROVE
Report for the Village Council Meeting
3/14/2017

SUBJECT:	SUBMITTED BY:
Stormwater & Flood Plain Amendments	Nan Newlon Director of Public Works

SYNOPSIS

An ordinance amending provisions of the Stormwater & Flood Plain Control Ordinance, Chapter 26 of the Downers Grove Municipal Code, has been prepared.

STRATEGIC PLAN ALIGNMENT

The goals for 2015-2017 include *Exceptional Municipal Services*.

FISCAL IMPACT

N/A

RECOMMENDATION

Approval on the March 21, 2017 Active Agenda.

BACKGROUND

Proposed Chapter 26 Municipal Code revisions are recommended to comply with the DuPage County Stormwater and Flood Plain Ordinance and to clarify current review procedures already in place to assist with permitting and enforcement. Each section of proposed code revisions is summarized with background information.

26.305

Chapter 26 of the Village Code uses DuPage County Stormwater and Flood Plain Ordinance (DCSWFPO) as its base. In 2013, DuPage County updated its Ordinance to remove this section, and staff recommends removing this section to be consistent with the County Ordinance.

26.600SEC

Language is proposed to clarify when a permit is required for various small projects including:

- Impervious projects under 500 square feet
- Stoops
- Patio removal and replacements
- Private side driveway removal and replacements- private side only.

Permits are required in order for staff to track increases in impervious area and effectively enforce the Ordinance. In addition, these reviews assist with tracking the source of damage to Village right-of-way, as

well as identify in advance potential grade changes that may cause significant drainage problems to adjacent property and increases in impervious area due to driveway expansion.

26.700SEC

Proposed change will add a reference to Chapter 13.7(f).

26.900SEC

This proposed change adds a requirement to provide erosion and sediment control to prevent sediment from entering the public drainage systems.

ATTACHMENTS

Ordinance

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ORDINANCE NO. _____

**AN ORDINANCE AMENDING
STORMWATER AND FLOOD PLAIN 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 26.305 is hereby amended to read as follows:

26.305 Reserved.

~~Requirements for Stormwater and Flood Plain Management, General.~~

- ~~1. All developments shall meet the requirements specified for general stormwater and flood plain development (Article V), site runoff (Article XI), sediment and erosion control (Article IX), and performance security (Article VIII).~~
- ~~2. All developments, with consideration given to those developments as noted in paragraph 7 below, shall comply with the site runoff storage requirements provided in Section 26-1101 of this Ordinance if:

 - ~~_____ a. The parcels being developed total three acres or greater for single or two family residential land uses; or~~
 - ~~_____ b. The parcels being developed total one acre or greater for multiple family or non-residential subdivision land uses; or~~
 - ~~_____ c. The parcels being developed total one acre or greater for multiple family or non-residential developments and the new development totals either individually or in the aggregate after February 15, 1992, to more than 25,000 square feet; or~~
 - ~~_____ d. All other developments not subject to the above requirements shall comply with the site runoff conveyance, storage, and drain tile requirements provided in Article XI if the Administrator determines that the development will create a rate of stormwater runoff from such land in excess of that which lawfully existed prior to the proposed development. Provided, upon determination of the Administrator that such increase in stormwater runoff will not adversely impact downstream properties, the developer may, in lieu of compliance with Section 26-1101, pay to the Village an amount equal to the estimated costs of providing stormwater storage which, as determined by the Administrator, is substantially equal to the increased stormwater runoff created by such development. Calculations of such increased amount of stormwater runoff shall be made on the basis of and expressed in terms of an acre foot of volume, or fraction thereof. The fee in lieu of Article XVI compliance shall be based on the cost per acre foot, as listed for each watershed, to be the amount reasonably equivalent to costs incurred by the Village to provide one acre foot of stormwater storage, including but not limited to land acquisition costs, engineering expenses, legal fees and other related expenses. Any fees collected by the Village pursuant to this subsection shall be segregated, held and expended within the same watershed as the subject development to enhance existing site runoff storage facilities and related components, construct off-site stormwater facilities and related components or undertake other development that provides a watershed benefit. Provided, however, that a portion of said funds may be budgeted annually for a cost-share program to assist residents with existing drainage concerns. Cost-share funds may be distributed throughout the year per Village policy.~~~~
- ~~3. Developments shall also meet the more specific requirements of applicable adopted Watershed Plans or adopted Interim Watershed Plans.~~
- ~~4. All development within flood plain and LPDAs, and substantial improvements within a flood plain, shall also satisfy the requirements specified in Section 26.1303 of this Ordinance.~~
- ~~5. All developers shall submit the documents specified in Article VII of this Ordinance to verify compliance with these requirements.~~

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6. Facilities constructed under the provisions of this Ordinance shall be maintained according to the criteria and guidelines established in the Plan. Maintenance is the responsibility of the owner of the land on which the stormwater facilities are constructed unless the responsibility is assigned, pursuant to Section 26.801 of this Ordinance, to an entity acceptable to the governmental unit that has jurisdiction over such land.

7. The Administrator shall consider granting an exception to paragraph 2 above for those developments listed below, if specific requirements are met for such development as listed or required by the Administrator.

A. The development is strictly limited to the grading of pervious areas in which the following specific requirements are met:

i. The Applicant must demonstrate to the Administrator's satisfaction that for all storm events, up to and including the critical duration 100-year event, the grading activity does not:

- a. result in an increase in runoff volume; and
- b. result in an increase in peak release rate; and
- c. result in a time decrease associated with the time concentration; and
- d. contribute to adjacent flood problems; and
- e. alter the direction of run off.

Section 2. That Section 26.600SEC. is hereby amended to read as follows:

26.600SEC. Permits.

Any person proposing a development shall obtain a Stormwater Management Permit, or the development must fit all conditions of a General Certification (Section 26.602), or if applicable, obtain a Letter of Permission (Section 26.601) unless the development meets the criteria of Section 26.600.A or one of the following criteria of Section 26.600.B.

A. The development is:

- 1. On a Development Site that does not include flood plain, LPDA, wetlands or buffers; and
- 2. The development does not add seven hundred (700) square feet or more of net new impervious area compared to the pre-development conditions; or
- 3. Does not include five hundred (500) square feet or more of land disturbing activities; or

B. The Development Site does not include wetlands, buffers or flood plains and consists solely of one or more of the following:

- 1. Cultivation, conservation measures or gardening; or
- 2. Installation, renovation or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
- 3. Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities; or
- 4. Maintenance, repair or at grade replacement of existing lawn areas not otherwise requiring a Stormwater Permit under this Ordinance.

A. A permit is required for:

- 1. All driveway removal, replacement or expansion of any size or material.
- 2. Any flatwork greater than one hundred (100) square feet in size. This includes new, replacement and/or expansion for patios, private walks and all other flatwork (refer to Chapter 28 Zoning Ordinance for setback requirements).
- 3. Any work involving steps or stoops.
- 4. Any development on a Development Site that includes flood plain, LPDA, wetlands or buffers, regardless of size or scope.
- 5. Any development that adds one hundred (100) square feet or more of net new impervious area compared to the pre-development conditions.
- 6. Any development that includes five hundred (500) square feet or more of land disturbing activities.

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B. A Stormwater Management permit is not required if the Development Site consists solely of one or more of the following (and does not include Wetland, Buffers or Flood Plains):

1. Cultivation, conservation measures or gardening;
2. Installation, renovation or replacement of a septic system, potable water service line or other utility to serve an existing structure;
3. Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities; or
4. Maintenance, repair or at grade replacement of existing lawn areas not otherwise requiring a Stormwater Permit under this Ordinance.

Section 3. 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 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

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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 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, any sump pump or downspout discharge onto the site from the subject property and from adjoining properties. Note if the discharge will splash to grade or show any associated piping. The distance between the discharge and the property line shall be maximized and any piped discharge must terminate no closer than 20 feet from the downstream property line and 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 days after final grade is reached. Stripped areas that will remain undisturbed for more than fifteen 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

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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.
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
 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.

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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 4. That Section 26.900SEC. is hereby amended to read as follows:

26.900SEC. Soil Erosion and Sediment Control General Requirements.

A. Soil erosion and sediment control features shall be considered as part of any development's initial site planning process, including the adjacent right-of-way. Soil erosion and sediment control related measures are required to be constructed and maintained for any land disturbance activity. The following factors shall be addressed:

- The susceptibility of the existing soils to erosion;
- Existing native and mature vegetation;
- Existing natural or established drainage ways;
- The natural contours of the land;
- Development phasing;
- Emphasis first on erosion control, then sediment control;
- Winter shutdown.

B. Temporary erosion and sediment control measures shall be functional, consistent with this Article of the Ordinance and the NPDES Stormwater Permit in effect prior to land disturbance activities, and remain in effect until permanent erosion control is established.

C. Soil disturbance shall be conducted in a manner that minimizes erosion. Areas of the development site that will not be graded shall be protected from construction traffic or other disturbance until stabilization of the disturbed areas has been completed.

D. Soil stabilization measures shall include the use of temporary or permanent measures.

E. Within fifteen (15) days of establishing final grade, all soil disturbing activities at the site must be 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 mulch or geotextiles) have been employed.

Section 5. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

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Section 6. That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

Mayor

Passed:

Published:

Attest: _____

Village Clerk