Version 1. (4-7-2023)

Proposed text amendment to 6-188.

Sec. 6-188. - Stormwater management.

(a) *Stormwater management*. All developments and earth changes subject to review under the requirements of this chapter shall be designed, constructed, and maintained to prevent flooding and protect water quality. The particular facilities and measures required on site shall reflect the natural features, wetlands, and watercourses on the site; the potential for on-site and off-site flooding, water pollution, and erosion; and the size of the site.

Available public storm sewer system - A public storm sewer system located in a right-of-way, easement, highway, or public way which crosses, adjoins, abuts, or is contiguous to the realty involved and passes not more than 200 feet at the nearest point from a structure in which storm sewer originates. Or, in the case of all other real estate or land, is located in a street, road, highway, right-of-way, easement, or public or private way crossing, adjoining, abutting, or contiguous to any realty land within the special assessment district heretofore created, on which is located a structure in which sanitary sewage originates.

- Stormwater management shall comply with the following standards:

(1) The design of storm sewers, detention facilities, and other stormwater management facilities shall comply with the standards of the village municipal standards and the Ingham County Drain Commissioner if deemed available .

1a. The Ingham County Drain Commission shall conduct a review of proposed solution to a sites storm water runoff and put together a review letter of determination as to how the site does or does not comply with their standards.

1b. If the Ingham County Drain Commissioner issues a determination that the site's storm water retention system does not comply with Supplement No. 4, because the site does not have a direct pipe for storm water from the retention area to a public storm water system and the proposed project does not have an impact on the County Drainage System, then the Planning Commission may vote to override that determination, if: 1) the public storm sewer system option is available within the meaning of this Ordinance and 2) if it can be demonstrated to the satisfaction of the Village Engineer that the retention design is sufficient

1c. The Village Engineer shall be empowered to recommend to the Planning Commission approval of other aspects of a drainage design, if the Village

Engineer disagrees with some other aspect of the Drain Commission's review.

(2) Stormwater management conveyance, storage and infiltration measures and facilities shall be designed to prevent flood hazards and water pollution related to stormwater runoff and soil erosion from the proposed development.

(3) The use of swales and vegetated buffer strips is encouraged in cases where the planning commission deems to be safe and otherwise appropriate as a method of stormwater conveyance so as to decrease runoff velocity, allow for natural infiltration, allow suspended sediment particles to settle, and to remove pollutants.

(4) Alterations to natural drainage patterns shall not create flooding water pollution for adjacent or downstream property owners.

(5) Discharge of runoff from any site which may contain oil, grease, toxic chemicals, or other polluting materials is prohibited. If a property owner desires to propose measures to reduce and trap pollutants, the owner must meet the requirements of the Michigan Department of Environmental Quality and the Ingham County Drain Commissioner If Ingham County Drain Commission drain and has no jurisdiction of storm water at site , based upon professionally accepted principles, such a proposal shall be submitted and reviewed by the village engineer, with consultation of appropriate experts.

(6) Drainage systems shall be designed to protect public health and safety and to be visually attractive, taking into consideration viable alternatives.

(a) *On-site stormwater detention.* For the purpose of controlling drainage to off-site properties and drainage ways, all properties which are developed under this chapter, whether new or improved shall provide for on-site detention storage of stormwater in accordance with the current Ingham County Drain Commission's standards. With the exception that a site can have retention only if no viable outlet option is available and if it can be demonstrated to the satisfaction of the Village Engineer that the retention design is sufficient (the Village Engineer may recommend to the Planning Commission that it 'disregard' drain commission's Supplemental #4) requirements, if the project does not have an impact on a County Drain.

(Ord. No. 2018.10-1, 10-1-2018)

Standards for Stormwater Management
Systems. Procedures and Design Criteria

Supplemental Standards No. 4 — September 28, 2021

The following Sections of the Rules of the Ingham County Drain Commissioner, 2005 Edition, is hereby revised and amended as follows:

PART 3: DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS

Add the following sentence on page 18 at the end of the introductory statement to PART 3. DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS on pages 17-18:

> All calculations for stormwater management systems, wherever applicable throughout these Rules, shall be based on National Oceanic Atmospheric Administration (NOAA) Atlas 14, as amended or updated.

The remainder of the introductory statement remains unchanged.

PART 3: DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS

SECTION 4: Retention Basins

Correct the spelling of the heading of Section 4 from SECYION 4 to SECTION 4.

Section 4.A to read as follows: A. No Outlet Retention Basins Retention basins with no outlet will not be allowed.

The remainder of Part 3, Section 4 remains unchanged.

PART 3: DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS

SECTION 5: Detention Retention Basins

5.1 and 5.3 remain unchanged.

Revise Section 5.2 to read as follows:

> 2. At a minimum, the volume of the permanent pool should at least of the IOO year storage volume.

Patrick E. Lindemann, Ingham County Drain Commissioner

Supplemental Standards No. 4 — September 28, 2021

The following Sections of the Rules of the Ingham County Drain Commissioner, 2005 Edition, and Supplemental Standards No. 3 are hereby revi*d and amended as follows:

PART 3: DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS SECTION 3: Retention and Detention Systems

Section 3: Paragraphs I _ through 5. and 6.a., 6.6. , 6.e„ 6e and 6.f. remain unchanged.

Revise Section 3: A, paragraph 6.d, to read as follows:

d. The volume and storage provided for controlling the bank full flood will he equal to or in excess of the runoff from a 2.0-year'24-hour storm. as calculated pursuant to the Michigan Department of Natural Resources' Stormwater Runoff Volume Control Calculation Spreadsheet, as amended or updated.