

**PLANNING AND DEVELOPMENT SERVICES STAFF REPORT**

**For Planning Commission Meeting of October 18, 2022**

**SUBJECT: Amendments to Chapter 55 (Unified Development Code), Section 5.22 Storm Water Management and Soil Erosion – to eliminate exceptions and revise alternatives criteria in Subsection 5.22.3, and to reorganize Subsections 5.22.2 and 5.22.3**

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the amendments to Chapter 55 Unified Development Code, Section 5.22 Storm Water Management and Soil Erosion, Subsection 5.22.3 Storm Water Management Systems, to eliminate currently offered exceptions and revise the criteria for approving alternative standards, and to reformat Subsections 5.22.2 and 5.22.3 with additional headings and tables for a more user-friendly and concise layout consistent and reorganized content for efficiency.

**STAFF RECOMMENDATION:**

Staff recommends that the amendments to the Unified Development Code be **approved**.

**SUMMARY:**

Two amendments are proposed to Subsections 5.22.3 (Storm Water Management Systems) of Section 5.22 Storm Water Management and Soil Erosion. First, a substantive amendment is proposed to eliminating currently offered exceptions. A second substantive amendment is proposed to revise, simplify and streamline the currently offered provisions for alternatives to storm water management. These amendments are proposed in response to comments from the Michigan Department of Environment, Great Lakes, and Energy during a periodic, routine review of the City’s federal permits for municipal storm sewer systems.

Also proposed is a reorganization of Subsections 5.22.2 and 5.22.3 (Single and Two-Family Residential Storm Water Management) to provide tables with compliance criteria and additional headings to more easily find standards and requirements. The reorganization does not amend any of the standards or requirements.

**BACKGROUND:**

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) raised several issues with the storm water management system requirements in Subsection 5.22.3 in a recent review letter. Those issues (see September 2, 2022 memorandum from Jerry Hancock,

Stormwater and Floodplain Programs Coordinator, attached) focused on exceptions to strict compliance with stormwater design standards for development.

The UDC references the Rules of the Washtenaw County Water Resources Commissioner (WCWRC) as our stormwater design standards. However, some exceptions are offered to developments within the City of Ann Arbor's storm water approval jurisdiction. Amending the exception language in the UDC is all that is necessary to address EGLE's concerns, not any changes to the Rules of the WCWRC itself.

While considering amendments to Subsection 5.22.3, the Stormwater and Floodplain Programs Coordinator also proposes amendments to the "alternative method of stormwater detention" provision. The alternative method has only been utilized once in the 20-plus years it has been in code. Amendments are proposed to allow more staff flexibility when site constraints make it infeasible to meet the full detention volume requirement while still maintaining the intent of the section.

These changes were discussed with the Ordinance Revisions Committee on July 26, 2022.

#### **REPORT:**

A detailed explanation and analysis of the proposed amendments, and the reorganization, is provided separately.

#### **1. Amendments to Eliminate Exceptions and Revise Alternatives Criteria**

Because the Ordinance to Amend Chapter 55 (Storm Water Management Systems) (attached) includes reformatting, which can make isolating substantive changes difficult, the amendments to eliminate the current exceptions are provided below in their original format.

##### **5.22.3 Storm Water Management Systems**

Compliance with the Storm Water Management Systems criteria of this Section 5.22 is required for any form of construction or removal or disturbance of any Natural Features that requires approval for any site plan, final preliminary plat, ~~or PUD site plan, for Grading Permits that do not require site plan, final preliminary plat, or PUD site plan approval.~~

~~Site plans for Planning Manager that do not increase the total impervious area of the Site and are not within the jurisdiction of the WCWRC shall be exempt from the Storm Water Management System requirements of this Section 5.22.~~

- A. For Sites within the jurisdiction of the WCWRC; or Sites with Storm Water Management Systems under multiple ownership or for multiple parcels, including but not limited to site condominiums; or residential developments containing greater than four Dwelling Units within two or more detached Structures; or Sites with Storm Water Management Systems serving more than one parcel; the Storm Water Management System shall be reviewed and receive preliminary plan approval from the

WCWRC prior to site plan, final preliminary plat, or PUD site plan approval by the City. For Sites that require review by the WCWRC, a permit or letter of final plan approval from the WCWRC Office shall be obtained prior to issuance of a Grading Permit by the City. Any exceptions to the Rules of the WCWRC listed in this Section 5.22 are not applicable to reviews performed by the WCWRC.

**B.** For Sites other than described in Section 5.22.2 and 5.22.3.A, on-site Storm Water Management Systems shall be required for any Site that is the subject of a site plan, final preliminary plat, or PUD site plan or Grading Permit. The Storm Water Management System shall be reviewed and receive approval from the PSA Administrator and meet the design criteria stated in the Rules of the WCWRC, with the following exceptions:

1. For Sites that ~~contain existing Impervious Surfaces, adding or removing and replacing Impervious Surfaces solely for the purpose of compliance with the Americans with Disabilities Act, or compliance with the State of Michigan Barrier Free Design Rules (Public Act 1 of 1966, as amended) shall be exempt from the Storm Water Management System requirements of this chapter~~ are less than one acre in size, site plans for Planning Manager and grading permits that do not increase the total impervious area of the site shall be exempt from the Storm Water Management System requirements of this Section 5.22.
2. Sites proposed to contain:
  - a. Impervious Surfaces less than 10,000 square feet require retention/infiltration only of the first flush storm events.
  - b. Impervious Surfaces equal to or greater than 10,000 square feet and less than 15,000 square feet require retention/infiltration only of the first flush and detention only of bankfull storm events.
  - c. Impervious Surfaces equal to or greater than 15,000 square feet require retention/infiltration of the first flush, and detention of bankfull, and 100-year storm event. Detention facilities designed for the 100-year storm event shall include a Sediment forebay.
- ~~3. Public Sidewalks are not required to be included in the storm water management calculations.~~
- ~~4. If the Site is located in an historic district designated by the City, then the Roof area of the historic Building(s) is not required to be included in the storm water management calculations. This exemption does not apply to noncontributing Structures within the historic district.~~

~~5.3.~~ Grading Permits, solely for vegetation clearing, Building demolition, removal of Impervious Surfaces, or other activities approved by the PSA Administrator, shall be exempt from the Storm Water Management Systems requirements of this chapter.

- C. ~~Within the D1 and D2 zoning districts, or Sites outside the D1 and D2 zoning districts that contain existing Impervious Surfaces, alternative methods of storm water detention may be allowed by the approving body~~ When site constraints make it infeasible to meet the full detention volume requirement, the PSA Administrator may approve a lower detention volume if each of the following conditions are met:
1. Control of the first flush storm event has been provided.
  2. A determination is provided by ~~an Architect or~~ Professional Engineer that Storm Water Management Systems ~~have been~~ will be provided on-site to the maximum extent feasible and that it is not feasible to provide any additional detention volume due to Site constraints including but not limited to groundwater conflicts, soil contamination, existing Buildings, ~~loss of existing parking below that required Section 5.19~~ or protection of Natural Features.
  3. The ~~alternative-proposed~~ method of storm water detention is consistent with the intent of this Section 5.22 and the goals of the Rules of the WCWRC, as determined by the PSA Administrator.
  4. The alternative method of storm water detention is specifically approved on a Grading Permit, site plan, final preliminary plat, or PUD site plan ~~in a separate action by the approving body~~.
  5. ~~The alternative method of storm water detention provides an equal or greater amount of resources, in the form of money or land or both, to the City that are at least as beneficial as the required volume of storm water detention that is not being provided on-site. The resources required shall be computed for residential sites at \$2.00 per square foot and commercial sites at \$2.50 per square foot of Impervious Surface not served by a detention facility meeting the design criteria of this section.~~
  6. ~~The alternative method of storm water detention is provided through one or both of the following methods:~~
    - a. ~~The Applicant donates money to the City for the express purpose of improving Storm Water Management Systems within the same watershed such as, but not limited to, regional detention, regional water quality improvements facilities, or increasing Floodplain storage capacity. The money may not be used for maintenance of existing public facilities.~~

~~b. The Applicant donates land to the City for the express purpose of improving Storm Water Management Systems within the same watershed. The donation of land is subject to acceptance by City Council. The donated land shall be suitable to be effectively used for improvements of the storm water system within the same watershed and pass Phase I and II Environmental Site Assessments prior to acceptance by City Council. The value of the land shall be determined by an appraisal prepared by an independent appraiser acceptable to the City Administrator. The appraisal will be submitted to the City Administrator who may use an independent review appraiser to assist with review.~~

- D. On a Site that requires the installation of a Storm Water Management System the detention facility shall be installed and stabilized prior to the issuance of building permits. The PSA Administrator may deem it necessary to modify the timing of installation of the detention facility when conditions, such as a detention facility that is integral to the Structure of a new Building, prevent installation prior to building permits. As-built verification from an Architect or Professional Engineer shall be submitted to the PSA Administrator for approval prior to issuance of any certificate of occupancy. The as-built verification shall include: elevations and volumes, outlet sizes and elevations, Stabilization information, and signature and seal of an Architect or Professional Engineer.
- E. Existing Wetlands shall not be modified for the purposes of Storm Water Management Systems unless it is determined that the existing Wetland is not regulated by Sections **Error! Reference source not found.** and **Error! Reference source not found.**. Where modifications to Wetland areas are allowed, the existing storage shall be maintained and shall not count toward meeting the requirements of this section.
- F. When residential Lots or units are proposed to be created, the runoff coefficients shall take into account the future Impervious Surfaces of these building Sites within the storm water management calculations.
- G. Storm Water Management System facilities shall be designed so that any discharge of storm water from the facility, which does not empty directly into a drain, shall be converted to sheet flow over the ground through the use of an energy dissipater, in a manner which will preclude Erosion, or other approved method as determined by the PSA Administrator.
- H. Prior to the issuance of a Grading Permit, the developer of the Storm Water Management System shall provide the City with an agreement, satisfactory to the City Attorney, that if maintenance is not performed to the reasonable satisfaction of the PSA Administrator, the City may, after posting reasonable notice on the Site, perform the maintenance activities

and charge all costs to the benefited properties. If the costs remain unpaid for 60 days, the City may assess those costs to the benefited properties as a single Lot assessment under City Code Section 1:292.

## **2. Reorganization of Subsection 5.22.2 and 5.22.3**

Subsections 5.22.2 and 5.22.3 form the heart of the storm water management standards, indicating when stormwater management is required, what design standards must be used, any exceptions or alternatives that may be allowed, and the procedures for review and approval. However, these paragraphs currently contain only text and no headings beyond the subsection level. Staff propose to reorganize and reformat these two subsections without any substantive changes beyond the amendments described above.

Subsection 5.22.2 is proposed to provide the compliance criteria for when stormwater management is required for both single and two-family residential (currently focused in Section 5.22.2) and all other developments (currently focused in Section 5.22.3). The criteria are presented in a table.

Subsection 5.22.3 is proposed to provide how sites are assigned jurisdiction, the required design standards, alternatives, and procedures for review and approval, with added headings corresponding to each topic.

The outline of the reformatted subsections is as follows:

### **5.22.2 Storm Water Management Compliance**

### **5.22.3 Storm Water Management Systems**

#### **A. Jurisdiction**

1. WCWRC
2. City of Ann Arbor

#### **B. Requirements**

#### **C. Standards and Procedures**

#### **D. Approval**

1. WCWRC Jurisdiction
2. City of Ann Arbor Jurisdiction
3. Grading Permits for Clearing, Demolition, or Removal

#### **E. Alternatives**

Prepared by Alexis DiLeo  
Reviewed by Brett Lenart  
10-13-22

Attachments: September 2, 2022 Memorandum from Jerry Hancock, Stormwater and Floodplain Programs Coordinator

Ordinance to Amend (Storm Water Management Systems) Final Draft 10-13-22  
Ordinance to Amend (Storm Water Management Systems) Annotated Strikeout

c: Development Review Team  
City Attorney's Office