# ORDINANCE NUMBER 2021-13

# AMENDMENTS TO SECTIONS 104, 202.2, 202.6, AND 203.3 OF THE KENDALL COUNTY STORMWATER MANAGEMENT ORDINANCE BY INCORPORATING BULLETIN 75 INTO THE KENDALL COUNTY STORMWATER MANAGEMENT ORDINANCE

<u>WHEREAS</u>, 55 ILCS 5/5-1062 allows Kendall County to adopt a Stormwater Management Ordinance; and

<u>WHEREAS</u>, Sections 808 and 1007 of the Kendall County Stormwater Management Ordinance permits the Kendall County Board to amend the Kendall County Stormwater Management Ordinance and provides the procedure through which amendments are granted; and

<u>WHEREAS</u>, Sections 104, 202.2, 202.6, and 203.3 reference information, data, and calculations from the Illinois State Water Survey Bulletins 70 and 71; and

<u>WHEREAS</u>, in March 2020, the Illinois State Water Survey Prairie Research Institute at the University of Illinois prepared Bulletin 75 which updated information, data, and calculations contained in Bulletins 70 and 71 for the Illinois Department of Commerce and Economic Opportunity; and

<u>WHEREAS</u>, on April 12, 2021, the Kendall County Planning, Building and Zoning Committee submitted a petition to amend Sections 104, 202.2, 202.6, and 203.3 of the Kendall County Stormwater Management Ordinance by changing references of Bulletins 70 and 71 to Bulletin 75 and making calculation adjustments to conform to Bulletin 75 data; and

<u>WHEREAS</u>, following due and proper notice by publication in the Kendall County Record on April 22, 2021, the Kendall County Board conducted a public hearing on May 18, 2021, at 9:00 a.m., in the County Office Building at 111 W. Fox Street in Yorkville, at which evidence, testimony, and exhibits in support of the requested amendments was presented and zero members of the public testified in favor or in opposition; and

<u>WHEREAS</u>, following due and careful consideration of the information provided at the May 18, 2021, public hearing, the Kendall County Board finds it to be in the public interest to amend the Kendall County Stormwater Management Ordinance by incorporating Bulletin 75 information into the Ordinance; and

## <u>NOW, THEREFORE, BE IT ORDAINED, BY THE COUNTY BOARD OF KENDALL COUNTY, ILLINOIS</u>, as follows:

Section 104 of the Kendall County Stormwater Management Ordinance is amended by the deleting the definition of Bulletin 70 and replacing it with the following:

"Bulletin 75. "Precipitation Frequency Study for Illinois" by James R. Angel and Momcilo Markus with Contributing Authors Kexuan Ariel Wang, Brian M. Kerschner, and Shailendra Singh, dated March 2020."

Section 202.2 of the Kendall County Stormwater Management Ordinance is amended by deleting the present language and replacing it with the following:

## "202.2 Minor Stormwater System Criteria

Minor stormwater systems shall be sized to convey runoff from the tributary watershed under pre-development or fully developed conditions as may create the greatest amount of runoff. The recurrence frequency for design purposes shall be the 10-year event. The rainfall data shall be from ISWS Bulletin 75. Inlet capacity shall generally be provided such that depth of ponding does not exceed 6 inches to facilitate the 10-year event. Pipe capacity shall generally be provided such that the calculated hydraulic grade line does not exceed the top of pipe elevation. The extent and determination of minor (and major) stormwater systems shall be at the discretion of the permitting authority based on project conditions."

Section 202.6 of the Kendall County Stormwater Management Ordinance is amended by deleting the present language and replacing it with the following:

#### "202.6 Design Rainfall

Any design runoff rate calculation shall use Illinois State Water Survey Bulletin 75 rainfall data to calculate flow from all tributary area upstream of the point of design. Peak discharges for conveyance design purposes shall be based on the critical duration event considering the appropriate rainfall distribution. Rational method design of conveyance systems shall use Illinois State Water Survey Bulletin 75 sectional rainfall data based intensity-duration-frequency curves."

Section 203.3 of the Kendall County Stormwater Management Ordinance is amended by deleting the present language and replacing it with the following:

### "203.3 Design Methods

Event hydrograph routing methods shall be used to calculate runoff storage volume requirements for stormwater management basins with total tributary areas greater than five acres. The hydrograph routing shall be HEC-1, (SCS methodology), HEC-HMS, TR-20, or TR-55 tabular method or as otherwise approved by the Administrator. Event hydrograph methods shall incorporate the following assumptions:

- a. Antecedent moisture condition = 2; and
- b. Appropriate Huff rainfall distribution; and
- c. 24-hour duration storm with a 1% probability (100-year frequency) of occurrence in any one year as specified by Illinois State Water Survey Bulletin 75 rainfall data multiplied by a correction factor of 1.13 to account for Bulletin 75 rainfall data.

Runoff storage volume requirements for stormwater management basins with total tributary areas equal to or less than five acres may utilize the *% Impervious to unit Area Detention* nomograph developed by NIPC (now known as CMAP) depicted in Table 203."

<u>IN WITNESS OF</u>, this ordinance has been enacted by a majority vote of the Kendall County Board and is effective this 18<sup>th</sup> day of May, 2021.

Attest:

Kendall County Clerk

Debbie GilletteY CL

Kendall County Board Chairman

Scott R. Gryder