ORD 19-1532 Exhibit A

- 1. That the following be added to the Table of Contents: "Appendix F. Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) Panels"
- 2. That the definition of "Wetland" in section 160.002 be and hereby is amended to include the following text, with such text to be codified as and for the new definition of "Wetland:"

"WETLAND." An area of land, which meets the criteria as defined in current federal methodology recognized by the U.S. Army Corps of Engineers regardless of whether or not the area of land is subject to the regulatory authority of U.S. Army Corps of Engineers or any other regulatory authority.

3. That section 160.014(F) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.014(F):

(F) Storm sewers shall be designed to convey the peak flow from a ten-year rainfall event with a hydraulic grade line that is entirely within the pipe. Rainfall frequency data shall be obtained from Appendix A, Table 1. Storm sewers and outfalls shall be designed to function at their design capacity during flooding conditions on the receiving stream or other body of water.

(1) At the discretion of the Stormwater Administrator, private industrial storm sewer may be designed with the hydraulic grade line up to 1 foot below the rim elevation. Any sewer that conveys offsite flows or flow from more than 1 acre of tributary area are not allowed to surcharge with this condition.

4. That section 160.014(N) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.014(N):

(N) At the discretion of the Stormwater Administrator, dual inlets are required at low points in public roads

5. That section 160.014(M) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.014(M):

(M) All public storm sewer must be televised with said recording submitted to the Department of Public Works prior to acceptance of all projects.

6. That section 160.019 be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.019:

The function of existing on-site depressional storage shall be preserved for both on-site and offsite tributary flows in addition to required detention. When depressional storage is removed it must be compensated for in the site runoff storage facility at a 1 to 1 ratio provided that offsite areas tributary to the existing depressional storage are routed through the site runoff storage facility. This requirement is in addition to the site runoff storage required in §§ 160.030 through 160.039. The Administrator may allow the function of depressional storage to be preserved if the applicant performs detailed pre- and post-project hydrologic and hydraulic modeling to identify the effect of the depressional storage on discharges over a range of rainfall frequencies.

7. That section 160.035(H)(2) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.035(H)(2):

| (z) Naturalized determion basin. | |
|----------------------------------|--|
| Minimum area | 8,000 s.f. at at NWL |
| Maximum area | No maximum |
| Depth | Ranging from 0.5 to 5.0 ft. (average 3.0 ft.); at least 5% of the area below NWL having pockets up to 5.0 ft. deep |

(2) Naturalized detention basin

| Maximum bounce | 100-year: 4.0 ft. residential (industrial/commercial may be greater based on approval by Administrator) 2-year: 1.0 ft. | | | | |
|----------------------------|--|--|--|--|--|
| Maximum drawdown time | 100-year: above NWL by 0.5 ft. for 72 hrs 2-yr: above NWL by 0.5 ft. for 36 hours | | | | |
| Maximum slopes | Freeboard elevation to 2-yr water level: 4:1 2-yr water level to 0.5 ft. below NWL: 8:1 0.5 to 1.5 ft. below NWL: variable 8:1 to 12:1 (safety ledge) >1.5 ft. below NWL: 2:1 Freeboard to 1.5 ft. below NWL: 5:1 avg. max. | | | | |
| Shoreline protection | Natural vegetation; biotechnical stabilization (depending on site-specific conditions); erosion control measures | | | | |
| Water quality enhancements | Maximize distance between inlets and outlets; no low-flow channel to be provided; energy dissipation measures at outlets; measures such as aerators, cascading streams, water falls, etc. are strongly recommended to maintain cooler water temperatures, promote water circulation and aeration, and provide aesthetic appeal | | | | |
| Minimum Topsoil | 18" | | | | |
| Landscape options | Natural, ornamental hybrid, and low maintenance turf; public access via stone outcroppings, groomed areas, etc. are recommended. A planting and maintenance report, provided by a recognized wetlands firm, must be submitted and approved. | | | | |

8. That section 160.081(A) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.081(A):

(A) The BFE shall be delineated onto the site topography to establish the regulatory floodplain area limits for regulation under this chapter. Regulatory floodplains shall be delineated onto the site map from the current FEMA FIRM, FBFM or LOMR and include those areas of the SFHA which are not regulatory floodplains. The Village of Romeoville is responsible for maintaining the effective FIS and a list of FIRM panels listed in Appendix F (which may be updated from time to time).

9. That section 160.081(B)(1) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.081(B)(1):

(1) The elevation of the 100-year profile corresponding to the location of the development as indicated in the flood profiles in the FEMA Flood Insurance Studies listed in Appendix F (which may be updated from time to time);

10. That section 160.082(A)(3) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.082(A)(3):

(3) If the proposed development would result in a change in the regulatory floodplain or BFE, the applicant shall obtain a LOMA/LOMR from FEMA. If the development will result in an increase in the BFE of more than one foot at any location a CLOMR must be obtained before any work is performed in the regulatory floodplain. No buildings may be built in the existing or proposed regulatory floodplain until the LOMA/LOMR receives concurrence from IDNR/OWR and is issued by FEMA and the building meets all the building protection standards (division (B) of this section). Proposed changes to the regulatory floodway delineation and the BFE must be submitted to IDNR/OWR for concurrence.

11. That section 160.091(A) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.091(A):

(A) Sections 160.087 through 160.100 of this chapter applies to development in or near streams, lakes, ponds and wetlands within the village. Streams, lakes, and ponds (including intermittent streams) are those which are shown on the United States Department of the Interior Geological Survey (USGS) 7.5 minute quadrangle National Wetlands Inventory Maps and those additional streams, lakes, and ponds delineated on the village Water Resources Management Plan map adopted as part of §§ 160.087 through 160.100 of this chapter. Those are hereby made a part of §§ 160.087 through 160.100 of this chapter, and two copies thereof shall remain on file at the village administrative building for public inspection. Wetlands are those designated by the most recent version of the U.S. Army Corps of Engineers Manual of Wetland Delineation. At the discretion of the Stormwater Administrator, a Letter of No Objection (LONO) may be required for any development adjacent to wetlands.

12. That section 160.091(B)(3)(a) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.091(B)(3)(a):

(a) Absolutely no development activity (except as provided below) may occur within the minimum setback. The minimum setback, should be a vegetated buffer strip, preferable planted with native plant species, shall be maintained or restored around the periphery of the area in question. The width of the buffer strip shall be as follows:

- 1. Twenty-five feet for a tributary length of 250 feet or less.
- 2. Fifty feet for a tributary length greater than 250 feet and less than 500 feet.
- 3. Seventy-five feet for a tributary length over 500 feet.

Note: the tributary length is the maximum length (measured prior to subdividing the parcel) of the project limits to the sensitive area or the length from a drainage divide to the sensitive area.

13. That section 160.112(D) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.112(D):

(D) A topographical map of the site, record drawings, and other required drawings shall be prepared, signed, and sealed by a professional land surveyor or professional engineer and tied to National Geodetic Vertical Datum, 1988 adjustment and any FEMA benchmarks.

14. That section 160.225(A)(5) be and hereby is amended to include the following text, with such text to be codified as and for the new section 160.225(A)(5):

(5) At the discretion of the Village Manager, water quality BMPs may be used as credit towards the fee-in-lieu of assuming all other criteria are met.

15. That Appendix A – Table 1 be and hereby is amended to include the following text, with such text to be codified as and for the Appendix A – Table 1:

| Table 1. Will County Stormwater Technical Guidance Manual Rainfall Depths and Intensities | | | | | | | | | | |
|---|-----------|---------|--------|---------|---------|---------|---------|---------|----------|---------|
| | Frequency | | | | | | | | | |
| Duration | 2-year | | 5-year | | 10-year | | 50-year | | 100-year | |
| | (in) | (in/hr) | (in) | (in/hr) | (in) | (in/hr) | (in) | (in/hr) | (in) | (in/hr) |
| 5 min | 0.38 | 4.56 | 0.49 | 5.88 | 0.59 | 7.08 | 0.84 | 10.08 | 1.00 | 12.00 |
| 10 min | 0.66 | 3.96 | 0.85 | 5.10 | 1.03 | 6.18 | 1.47 | 8.82 | 1.75 | 10.50 |
| 15 min | 0.85 | 3.40 | 1.09 | 4.36 | 1.32 | 5.28 | 1.89 | 7.56 | 2.25 | 9.00 |
| 30 min | 1.17 | 2.34 | 1.50 | 3.00 | 1.81 | 3.62 | 2.58 | 5.16 | 3.08 | 6.16 |
| 1 hour | 1.49 | 1.49 | 1.90 | 1.90 | 2.30 | 2.30 | 3.28 | 3.28 | 3.92 | 3.92 |
| 2 hour | 1.83 | 0.92 | 2.35 | 1.18 | 2.84 | 1.42 | 4.05 | 2.03 | 4.84 | 2.42 |
| 3 hour | 2.02 | 0.67 | 2.59 | 0.86 | 3.14 | 1.05 | 4.47 | 1.49 | 5.34 | 1.78 |
| 6 hour | 2.37 | 0.40 | 3.03 | 0.51 | 3.67 | 0.61 | 5.24 | 0.87 | 6.25 | 1.04 |
| 12 hour | 2.75 | 0.23 | 3.52 | 0.29 | 4.26 | 0.36 | 6.07 | 0.51 | 7.25 | 0.60 |

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| 18 hour | 2.97 | 0.17 | 3.80 | 0.21 | 4.61 | 0.26 | 6.56 | 0.36 | 7.84 | 0.44 |
|----------|------|------|------|------|------|------|------|------|-------|------|
| 24 hour | 3.16 | 0.13 | 4.05 | 0.17 | 4.90 | 0.20 | 6.98 | 0.29 | 8.34 | 0.35 |
| 48 hour | 3.42 | 0.07 | 4.37 | 0.09 | 5.29 | 0.11 | 7.54 | 0.16 | 9.00 | 0.19 |
| 72 hour | 3.67 | 0.05 | 4.69 | 0.07 | 5.68 | 0.08 | 8.10 | 0.11 | 9.67 | 0.13 |
| 120 hour | 3.93 | 0.03 | 4.91 | 0.04 | 5.70 | 0.05 | 8.04 | 0.07 | 9.96 | 0.08 |
| 240 hour | 4.95 | 0.02 | 6.04 | 0.03 | 6.89 | 0.03 | 9.38 | 0.04 | 11.14 | 0.05 |

16. That Appendix F be and hereby is amended to include the following text, with such text to be codified as and for the Appendix F:

APPENDIX F

Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) PanelsCommunity Name:Village of RomeovilleCommunity Number:170711

Flood Insurance Study - Effective February 15, 2019

| <u>Map Panel</u> | Map Revised: |
|------------------|-------------------|
| 17197C0045G | February 15, 2019 |
| 17179C0058G | February 15, 2019 |
| 17197C0061G | February 15, 2019 |
| 17197C0062G | February 15, 2019 |
| 17197C0065G | February 15, 2019 |
| 17197C0070G | February 15, 2019 |
| 17197C0135G | February 15, 2019 |
| 17197C0154G | February 15, 2019 |
| 17197C0155G | February 15, 2019 |
| 17197C0156G | February 15, 2019 |
| | |