

Watershed Management Ordinance

Effective

May 1, 2014

As amended

April 4, 2019

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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

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AN ORDINANCE

AN ORDINANCE HEREINAFTER KNOWN AS THE "WATERSHED MANAGEMENT ORDINANCE," ADOPTED BY THE BOARD OF COMMISSIONERS, METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, ON OCTOBER 3, 2013 AND AS AMENDED TO, AND INCLUDING, APRIL 17, 2014, MAY 1, 2014, JULY 10, 2014, FEBRUARY 15, 2018, AND APRIL 4, 2019

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Table of Contents

ARTICLE 1. AUTHORITY AND PURPOSE 1-1

§ 100. Statutory Authority 1-1

§ 101. Cook County Stormwater Management Plan 1-1

§ 102. Considerations 1-1

§ 103. Purposes of this Ordinance 1-2

§ 104. Relationship to the Sewer Permit Ordinance and Manual of Procedures 1-4

ARTICLE 2. APPLICABILITY AND GENERAL PROVISIONS 2-1

§ 200. Scope of Regulation 2-1

§ 201. Applicability 2-3

§ 202. Interpretation 2-5

§ 203. Disclaimer of Liability 2-5

§ 204. Severability 2-6

§ 205. Right of Access 2-6

§ 206. National Flood Insurance Program Eligibility 2-7

§ 207. Multi-County Municipalities 2-7

§ 208. Amendments 2-8

§ 209. Effective Date 2-8

ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS 3-1

§ 300. General Requirements and Limitation 3-1

§ 301. Watershed Management Permit Application and Submittals 3-2

§ 302. Erosion and Sediment Control Submittal 3-4

§ 303. Stormwater Management Submittal 3-5

§ 304. Floodplain Submittal 3-8

§ 305. Wetland Submittal 3-10

§ 306. Riparian Environment Submittal 3-12

§ 307. Sewer Construction Submittal 3-13

§ 308. Maps, Exhibits and Plan Sheets Submittal 3-15

§ 309. Recordation of Watershed Management Permit 3-25

§ 310. Maintenance and Monitoring Plan Submittal 3-25

§ 311. Record Drawings 3-28
§ 312. Terms of Permit/Denial - Appeal 3-29
§ 313. Permit Fees 3-29
§ 314. Construction Timeline Requirements and Approval of Plan Revisions 3-30
ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL 4-1
§ 400. Erosion and Sediment Control General Requirements 4-1
§ 401. Temporary Erosion Control Requirements 4-1
§ 402. Temporary Sediment Control Requirements 4-3
§ 403. Construction Site Management Requirements 4-4
§ 404. Permanent Erosion Control Requirements 4-5
ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT 5-1
§ 500. General Site Development and Stormwater Management Information 5-1
§ 501. General Site Development and Stormwater Management Requirements 5-1
§ 502. Site Runoff Requirements 5-3
§ 503. Site Volume Control Requirements 5-7
§ 504. Site Detention Requirements 5-10
§ 505. Allowances for Redevelopment and Development Subject to Legacy SPO 5-16
ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS 6-1
§ 600. Flood Protection Areas 6-1
§ 601. Requirements for Floodplain, Regulatory Floodway, and Flood Protection 6-1
§ 602. Requirements for Development within the Floodplain and Residential Buildings within 100-feet of the Floodplain 6-4
§ 603. Requirements for Wetland Boundary, Quality, and Buffer Width Determination 6-10
§ 604. Requirements for Development Affecting the Function of Wetlands 6-14
§ 605. Wetland Banking 6-18
§ 606. Riparian Environments Requirements 6-19
§ 607. Requirements for Development That Affect the Function of Riparian Environments 6-20
§ 608. Requirements for Outfalls 6-23
ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION 7-1
§ 700. General Sewer Construction Requirements 7-1

§ 701. Qualified Sewer Construction 7-3
§ 702. Qualified Sewer Construction Requirements 7-5
§ 703. Facility Connection Authorization 7-12
ARTICLE 8. INFILTRATION / INFLOW CONTROL PROGRAM 8-1
§ 800. Introduction 8-1
§ 801. Scope and Goals 8-1
§ 802. Applicability 8-2
§ 803. General Requirements 8-2
§ 804. Short Term Requirements 8-2
§ 805. Long Term O&M Program 8-4
§ 806. Annual Reporting 8-5
§ 807. Non-Compliance 8-6
§ 808. Administrative Proceedings: Notice of Non-Compliance 8-7
§ 809. Administrative Proceedings: Show Cause before the Board of Commissioners 8-8
§ 810. Notice of Show Cause 8-8
§ 811. Show Cause Hearing and Imposition of Penalties by the Board of Commissioners 8-8
§ 812. Legal and Equitable Relief 8-10
§ 813. Injunctive Relief 8-10
§ 814. Judicial Review 8-10
ARTICLE 9. MAINTENANCE 9-1
§ 900. General Maintenance Requirements 9-1
§ 901. Permitted Facility Operation and Maintenance 9-2
§ 902. Maintenance Requirements for Stormwater Projects with No Permittee 9-3
ARTICLE 10. INSPECTIONS 10-1
§ 1000. General 10-1
§ 1001. Inspection Requirements to be met by Development 10-1
§ 1002. Special Requirements for Qualified Sewer Construction 10-2
§ 1003. Request for Final Inspection 10-3
ARTICLE 11. VARIANCES 11-1
§ 1100. Authority 11-1

§ 1101. Petition for Variance 11-1
§ 1102. Co-Permittee's Notice of Petition 11-2
§ 1103. Standards 11-3
§ 1104. Submission of Written Comments 11-4
§ 1105. Determination by the District 11-4
§ 1106. Conditions 11-6
ARTICLE 12. PROHIBITED ACTS, ENFORCEMENT, AND PENALTIES 12-1
§ 1200. Prohibited Acts 12-1
§ 1201. Administrative Proceedings: Notice of Violation 12-1
§ 1202. Administrative Proceedings: Proceedings for Show Cause 12-3
§ 1203. Notice of Show Cause 12-4
§ 1204. Show Cause Hearing and Imposition of Civil Penalties by Board of Commissioners 12-4
§ 1205. Revocation of Watershed Management Permits 12-6
§ 1206. Stop-Work Order 12-6
§ 1207. Additional Remedies for Flood Protection Areas 12-7
§ 1208. Legal and Equitable Relief 12-7
§ 1209. Injunctive Relief 12-8
ARTICLE 13. APPEALS 13-1
§ 1300. Right to Appeal 13-1
§ 1301. Appeals to the Director of Engineering 13-1
§ 1302. Appeals to the Board of Commissioners 13-2
ARTICLE 14. ADMINISTRATION 14-1
§ 1400. Responsibility for Administration 14-1
§ 1401. Role of the District 14-1
§ 1402. Role of an Authorized Municipality 14-2
§ 1403. Procedure for Authorization 14-4
§ 1404. District Oversight of Authorized Municipalities 14-5
§ 1405. Representative Capacity 14-6
Signature Page

Appendix A Definitions

Appendix B Watershed Specific Release Rates

Appendix C Legacy Sewer Permit Ordinance and Manual of Procedures for the Administration of the Sewer Permit Ordinance

Appendix D U.S. Army Corps of Engineers Watershed Services Areas

Appendix E Watershed Planning Areas

Appendix F Permit Fees to the Watershed Management Ordinance

Appendix G Existing Intergovernmental Agreements

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ARTICLE 1. AUTHORITY AND PURPOSE

§ 100. Statutory Authority

1. This **Ordinance** shall be known and may be cited as the Watershed Management Ordinance (**Ordinance**).

2. The Metropolitan Water Reclamation District of Greater Chicago (**District**) promulgates this **Ordinance** pursuant to its authority to adopt ordinances regulating sewers tributary to the **District's water reclamation plants**, regulating **floodplain** and **stormwater** management, and governing the location, width, course, and release rate of all **stormwater runoff** channels, streams, and basins in **Cook County**, over which the **District** has jurisdiction, in accordance with the adopted Cook County Stormwater Management Plan (**CCSMP**). The statutory authority for this **Ordinance** is contained in 55 ILCS 5/5-1062.1, 70 ILCS 2605/1 *et seq.,* and particularly 70 ILCS 2605/7f, 70 ILCS 2605/7h, 70 ILCS 2605/12, as well as other applicable authority, all as amended from time to time.

3. An **authorized municipality**, as defined in Article 14 of this **Ordinance**, may adopt this **Ordinance** pursuant to its authority to adopt ordinances regulating **floodplain** and **stormwater** management and governing the location, width, course, and release rate of all **stormwater runoff** channels, streams, and basins in the **authorized municipality**, over which the **authorized municipality** has jurisdiction. The statutory authority for an **authorized municipality** to adopt this **Ordinance** is contained in the Illinois Municipal Code, 65 ILCS 5/1 *et seq.*, as well as other applicable authority, all as amended from time to time.

§ 101. Cook County Stormwater Management Plan

The **District**'s **Board of Commissioners** adopted the **CCSMP** on February 15, 2007. This **Ordinance** is a component of the countywide **stormwater** management program presented in the **CCSMP**. Other components of the countywide **stormwater** management program include the **development** of Detailed Watershed Plans (**DWPs**) for the major **watersheds** of **Cook County**. The **CCSMP** and **DWP**s are available on the **District**'s website, www.mwrd.org.

§ 102. Considerations

The **District** has considered numerous factors in the creation of this **Ordinance** including but not limited to:

1. Inappropriate **floodplain** uses and **development** have increased **flood** risk, **flood** damage, and environmental degradation;

2. It is necessary to consider **stormwater** management on a **watershed** basis;

3. **Cook County** lands drain poorly due to generally flat topography and soils of low permeability;

4. Many land **development** practices alter the natural hydrologic balance of **Cook County** streams;

5. **Wetlands** play an essential role in **flood** storage, **floodplain** management, **sediment** control, and water quality enhancement;

6. **Riparian environments** may be effective in reducing flow rates and volumes in addition to providing stream bank **erosion** protection and water quality enhancements;

7. Many **stormwater facilities** are not adequately maintained;

8. While the **District** has required **stormwater** detention in **separate sewer areas** since 1972 via the **Sewer Permit Ordinance**, **flooding** continues to be a concern in **Cook County** due to the increased volume and rate of **stormwater runoff** resulting from continued **development**;

9. **Stormwater** detention requirements for new **developments** alone do not address the impacts of transportation and other improvements; and

10. Infiltration and inflow contributes to **basement** backups, **sanitary sewer** overflows, and excessive flows to the **District**'s **water reclamation facilities**.

§ 103. Purposes of this Ordinance

The purpose of this **Ordinance** is to effectuate the purposes and intent of the Metropolitan Water Reclamation District Act (70 ILCS 2605/1 *et seq.*) by:

1. Protecting the public health, safety, and welfare, and reducing the potential for loss of property due to **flood** damage;

2. Managing and mitigating the effects of urbanization on **stormwater** drainage throughout **Cook County**;

3. Protecting existing and new **development** by minimizing the increase of **stormwater runoff** volume beyond that experienced under existing conditions and by reducing peak **stormwater** flows;

4. Promoting responsible land use practices in **Cook County**, particularly within **floodplains** and **floodways**;

5. Protecting existing water resources, including **lakes**, streams, **floodplains**, **wetlands**, and **groundwater** from detrimental and unnecessary modification in order to maintain their beneficial functions;

6. Reducing or mitigating the environmentally detrimental effects of existing and future **runoff** in order to improve and maintain water quality;

7. Preserving and enhancing existing **riparian environments**;

8. Controlling **erosion** and the discharge of **sediment** from all sources including, but not limited to, **stormwater facilities**, **waterways**, **developments**, and construction **sites**;

9. Requiring appropriate and adequate provisions for **site runoff** control;

10. Requiring consistency in **stormwater** management activities within and among the units of government having **stormwater** management jurisdiction;

11. Ensuring future **development** in the **floodplain** does not adversely affect **floodplain** environments or increase the potential for **flood** damage;

12. Requiring regular, planned **maintenance** of **stormwater** management facilities;

13. Encouraging control of **stormwater** quantity and quality at the most **site**-specific or local level;

14. Establishing uniform and minimum countywide **stormwater** management regulations while recognizing and coordinating with **stormwater** programs effectively operating within **Cook County**;

15. Requiring strict compliance with and enforcement of this **Ordinance**;

16. Meeting the **floodway** permitting requirements of the Illinois Department of Natural Resources, Office of Water Resources, delineated in the Rivers, Lakes, and Streams Act (615 ILCS 5/18g);

17. Complying with the rules and regulations of the National Flood Insurance Program (**NFIP**) thereby making federally subsidized **flood** insurance available;

18. Protecting the ability of the **District's** sewerage systems, intercepting sewers, **TARP structures**, **sewage** disposal and treatment plants, works and facilities to perform the functions for which they were designed;

19. Controlling the nature, volume, and manner of discharge into the **District's** sewerage systems, intercepting sewers, **TARP structures**, **sewage** disposal and treatment plants, works, and facilities;

20. Maintaining stable operation of the **District's** sewerage systems, intercepting sewers, **TARP structures**, **sewage** disposal and treatment plants, works, and facilities;

21. Reducing infiltration and inflow into the **District's** sewerage systems, intercepting sewers, **TARP structures**, **sewage** disposal and treatment plants, works, and facilities; and

22. Protecting waters within **Cook County** so as to preserve the public health.

§ 104. Relationship to the Sewer Permit Ordinance and Manual of Procedures

1. **Permittees** and **co-permittees** that have **Sewerage System Permits** issued prior to the effective date of this **Ordinance** shall retain all rights, obligations and liabilities under the **Sewer Permit Ordinance** and the Manual of Procedures for the Administration of the Sewer Permit Ordinance (**Manual of Procedures**) as they existed prior to their repeal.

2. Proposed **development** for which a complete **Sewerage System Permit** application has been accepted by the **District** prior to the effective date of this **Ordinance** will retain all rights, obligations and liabilities under the **Sewer Permit Ordinance** and the **Manual of Procedures** as they existed prior to their repeal.

3. Effective May 1, 2014, the **Sewer Permit Ordinance** and its companion ordinance, the **Manual of Procedures,** will be repealed. (See **District** Ordinance repealing the **Sewer Permit Ordinance** and the Manual of Procedures for the Administration of the Sewer Permit Ordinance, April 17, 2014).

4. The requirements for **qualified sewer construction** are now contained in Article 7 of this **Ordinance**.

ARTICLE 2. APPLICABILITY AND GENERAL PROVISIONS

§ 200. Scope of Regulation

1. This **Ordinance** applies to all **development** within the boundaries of **Cook County**, Illinois and **qualified sewer construction** within the **District**'s corporate boundaries or service agreement areas, over which the **District** has jurisdiction as described in §100.2 of this **Ordinance**, including those **developments** under the control of any governmental entity, agency, or authority.

2. Any **person** proposing a **development** that falls under any of the categories set forth in §201 of this **Ordinance** shall obtain a **Watershed Management Permit** prior to **development**.

3. The requirements for sewer construction contained within Article 7 of this **Ordinance** supersede the requirements of the repealed **Sewer Permit Ordinance** and the **Manual of Procedures**, which make up Appendix C of this **Ordinance**. Any **person** proposing to install **qualified sewer construction** within the **District**'s corporate limits or service agreement areas, as detailed under Article 7 of this **Ordinance**, shall obtain a **Watershed Management Permit** prior to commencing sewer work.

4. The provisions of this **Ordinance** shall **not** apply to any of the following:

   A. Agriculture and gardening activities that do not involve filling, grading, or construction of levees;

   B. **Structures** and land uses existing as of the effective date of this **Ordinance**, except when **redevelopment** occurs;

   C. Proposed **development** with an active **Sewerage Systems Permit** issued prior to the effective date of this **Ordinance,** which has not been fully constructed by the effective date of this **Ordinance**. **Stormwater** management provisions for such **development** shall conform to the approved plans and specifications of the issued **Sewerage System Permit** and shall not result in any increase in **impervious area** over the amount specified by the **Sewerage System Permit**;

   D. Proposed **development** for which a complete **Sewerage System Permit** application has been accepted by the **District** prior to the effective date of this **Ordinance**. Any such **Sewerage System Permit** application shall be subject to the **Sewer Permit Ordinance** and **Manual of Procedures** effective at the time the application was made. A complete **Sewerage System Permit** application is considered accepted by the **District** upon actual receipt by the **District** and is minimally composed of the following:

(1) Complete and executed **Sewerage System Permit** forms consisting of Schedules A, B, C, and D where **stormwater** detention is required;

(2) **Sewerage System Permit** fee paid in full;

(3) Plan drawings signed and sealed by a **Professional Engineer**; and

(4) Permit documents signed by the **permittee** and **co-permittee**;

E. **Development** within the corporate boundaries of the City of Chicago, Illinois except for any of the following:

(1) New or reconstructed sewers, drainage, or **outfalls** to **waterways** or Lake Michigan;

(2) **Stormwater** discharges directly to **District** property; and

(3) Direct connections to **District** interceptors, **TARP structures**, facilities, or **District** property;

F. **Development** activities listed in §201.1 of this **Ordinance** that are within the corporate boundaries of a **multi-county municipality**, which has adopted and currently enforces the **stormwater** ordinance of a **contiguously** adjacent Illinois county subject to the requirements of §207 of this **Ordinance**;

G. **Development** activities listed solely in §201.1 of this **Ordinance** that are undertaken by state or federal agencies (e.g. **IDOT**, Illinois Tollway Authority, or the **Corps**);

H. **Development** activities listed solely in §201.1 of this **Ordinance** that are undertaken as a **flood control project**; or

I. **Development** undertaken by the **District**.

5. Existing **structures** that do not conform to the requirements of this **Ordinance** shall not be substantially improved, replaced, or enlarged in any manner unless such **substantial improvements**, replacements, or enlargements conform to the requirements of this **Ordinance**.

§ 201. Applicability

Table 1. Applicability Summary				
Activity		**Regulated Area**	**Permitting Authority**	**See Section**
Development Activities	**Development** disturbing more than 0.5 acre*	**Cook County** Except City of Chicago	**District** or **Authorized Municipality**	§ 201.1.D
	Reconfiguration of existing **major** or **minor stormwater systems** which alters the service area of a **District** permitted **detention facility**	**Cook County** Except City of Chicago	**District**	§ 201.2.E
	Modifications to a **District** permitted **detention facility**	**Cook County** Except City of Chicago	**District**	§ 201.2.F
Flood Protection Areas	**Development** within a **flood protection area**	**Cook County** Except City of Chicago	**District** or **Authorized Municipality**	§ 201.1.A
	Indirect impacts to a **wetland**	**Cook County** Except City of Chicago	**District** or **Authorized Municipality**	§ 201.1.B
	Development of residential **buildings** within 100-feet of the **regulatory floodplain**, excluding non-**substantial improvements** to a **single-family home**	**Cook County** Except City of Chicago	**District** or **Authorized Municipality**	§ 201.1.C
Qualified Sewer Construction	Sewers, drainage, or detention in **combined sewer areas** tributary to **combined sewers** or **waterways**	**District** Corporate Limits or Service Areas Except City of Chicago	**District**	§ 201.2.A
	Qualified sewer construction including lift stations	**District** Corporate Limits or Service Areas Except City of Chicago	**District**	§ 201.2.B
District Impacts	Direct connections to **District** interceptors, reservoirs, facilities, or **TARP Structures**	Entire **Cook County** Including City of Chicago[+]	**District**	§ 201.2.C & § 201.3
	Stormwater discharges directly to **District** Property	Entire **Cook County** Including City of Chicago[+]	**District**	§ 201.2.G & § 201.3
	New or reconstructed sewers, drainage, or detention **outfalls** to **waterways** or Lake Michigan	**Cook County** Including City of Chicago[+]	**District**	§ 201.2.D & § 201.3

*unless the **development** solely involves one or more activity listed in §201.1.D.

[+]**Facility connection authorization** as outlined in §703.

1. A **Watershed Management Permit** from either the **District** or an **authorized municipality** shall be required for any of the following **development** activities:

   A. **Development** within a **Flood Protection Area**;

   B. **Development** with an **indirect wetland impact**;

   C. **Development** of residential **buildings** within 100-feet of the **regulatory floodplain**, excluding non-**substantial improvements** to a **single-family home**; and

   D. **Development** disturbing more than 0.5 acre, unless the **development** solely involves one or more of the following:

      (1) Installation, renovation, or replacement of a septic system, potable water service line, or other utility to serve an existing **structure**, provided that the area is restored to existing grade and vegetative cover is restored;

      (2) Excavation in public rights-of-way or public utility easements, outside of **flood protection areas**, for the purpose of installing or maintaining utilities other than **qualified sewer construction**, provided that the area is restored to existing grade and vegetative cover is restored. Utility excavation not requiring a **Watershed Management Permit** must install and maintain adequate **sediment** and **erosion** control;

      (3) **Maintenance activities**, repair, or at-grade in-kind replacement of existing lawn areas not otherwise requiring a **Watershed Management Permit**, provided that the area is restored to existing grade and vegetative cover is restored; or

      (4) **Maintenance activities**, repair, or in-kind replacement of existing **impervious areas** including, but not limited to, roadways or parking lots not otherwise requiring a **Watershed Management Permit**.

2. A **Watershed Management Permit** from the **District** shall be required for any of the following **development** activities:

   A. **Development** proposing sewers, drainage, or detention in **combined sewer areas** tributary to either a **combined sewer** or a **waterway**;

   B. **Permittees** or **co-permittees** proposing **qualified sewer construction** within the **District**'s corporate boundaries or service agreements areas;

C. **Development** proposing a direct connection to **District** interceptors, reservoirs, facilities, or **TARP structures**;

D. **Development** proposing new or reconstructed sewer, drainage, or **outfalls** to the **waterways** or Lake Michigan, within **Cook County**;

E. **Development** proposing reconfiguration of existing **major** or **minor stormwater systems** which alters the service area of a **District** permitted **detention facility**;

F. **Development** proposing modifications to the outlet control structure or storage volume of a **District** permitted **detention facility**;

G. **Development** discharging **stormwater** directly to **District** property; and

H. **Non-residential development** on septic systems or private treatment systems proposing a connection to a **sanitary sewer**.

3. **Development** located within the City of Chicago that proposes a direct or indirect connection to **District** interceptors, reservoirs, facilities, or **TARP structures** or new or reconstructed sewers, drainage, or detention **outfalls** to **waterways** or to Lake Michigan shall obtain a **facility connection authorization**.

§ 202. Interpretation

1. This **Ordinance** shall be liberally construed to protect the health, welfare, safety, and environment of the residents of **Cook County** and to effectuate the purposes of this **Ordinance** and enabling legislation.

2. Nothing contained in this **Ordinance** shall be understood to imply consent, licensing, or permission to locate, construct, or maintain any **structure**, **site**, or facility, nor to carry on any trade, industry, occupation, operation, or activity.

3. When provisions of this **Ordinance** differ or conflict with any other applicable statute, law, ordinance, regulation, or rule, the more stringent provisions shall apply.

4. The provisions of this **Ordinance** are cumulative and shall be considered additional limitations on all other laws and ordinances previously approved, or that may hereafter be approved, and that concern any subject matter included in this **Ordinance**.

§ 203. Disclaimer of Liability

1. The degree of **flood** protection provided by this **Ordinance** is considered reasonable for regulatory purposes and is based on engineering experience and scientific methods of study.

2. This **Ordinance** does not warrant that areas outside the delineated **floodplain** or permitted **developments** within the delineated **floodplain** will be free from **flooding** and associated damages.

3. This **Ordinance** shall not be construed or applied in any manner to create liability on the part of, or a cause of action against, the **District**, any **municipality**, or any elected official, officer, agent, or employee thereof, for any damage or injury to **person** or property resulting from reliance on the provisions of this **Ordinance** or from reading or interpreting any map that is part of this **Ordinance**.

4. The design and supplementary design requirements contained herein do not replace nor substitute sound engineering practice.

§ 204. Severability

1. The provisions of this **Ordinance** shall be severable in accordance with the following:

   A. If any court of competent jurisdiction shall adjudge any provision of this **Ordinance** invalid, such judgment shall not affect any other provisions of this **Ordinance**; and

   B. If any court of competent jurisdiction shall adjudge invalid the application of any provision of this **Ordinance** to a particular **parcel** of land, a particular **structure**, or a particular **development**, such judgment shall not affect the application of said provisions to any other **parcel** of land, **structure**, or **development**.

2. All such unaffected provisions of this **Ordinance** shall remain in full force and effect.

§ 205. Right of Access

1. Representatives of the **District** may, at all reasonable times during regular business hours or upon notice, enter upon any **development** subject to this **Ordinance** for the purpose of conducting periodic inspections to ensure compliance with this **Ordinance** or with a **Watershed Management Permit** issued thereunder. The scope of the inspection, including reviewing and copying of records, is limited to determining whether the **development** is in compliance with all requirements and conditions of this **Ordinance** and/or **Watershed Management Permit**.

2. The **District** may periodically inspect any mitigation measure at reasonable times and such inspection shall be limited to determining whether the **development** is in compliance with all requirements and conditions of this **Ordinance** and/or a **Watershed Management Permit**.

3. An inspection may also be conducted in accordance with §1201.4 of this **Ordinance**.

§ 206. National Flood Insurance Program Eligibility

1. This **Ordinance** does not repeal any county/municipal ordinance or resolution passed in order to establish eligibility for the National Flood Insurance Program (**NFIP**).

2. This **Ordinance** is not intended to supplement, replace, or remove any responsibility that either **Cook County** or a **municipality** may have to maintain eligibility and good standing in the **NFIP**. Proper administration and enforcement of the **NFIP** within participating municipalities and counties is a requirement of the **NFIP**.

3. **Floodplain** requirements included in Article 6 of this **Ordinance** meet or exceed the **NFIP** requirements for **development** as set forth under the Code of Federal Regulations (44 C.F.R.§ 59-60).

§ 207. Multi-County Municipalities

1. A **multi-county municipality** may adopt and enforce one of the following ordinances of an adjacent county if the **municipality** has corporate area within that county:

   A. The DuPage County Countywide Stormwater and Flood Plain Ordinance, as amended from time to time by the DuPage County Board;

   B. The Kane County Stormwater Ordinance, as amended from time to time by the Kane County Board;

   C. The Lake County Watershed Development Ordinance, as amended from time to time by the Lake County Board;

   D. The McHenry County Stormwater Management Ordinance, as amended from time to time by the McHenry County Board; or

   E. The Will County Stormwater Management Ordinance, as amended from time to time by the Will County Board.

2. A **Watershed Management Permit** shall not be required from the **District** for any **development** activity specified in §201.1, §201.2.E, and §201.2.F of this **Ordinance** within a **multi-county municipality**, in which the **multi-county municipality** elects to adopt an adjacent county's ordinance as specified in §207.1 of this **Ordinance** and satisfies all of the following requirements:

   A. Has the authority to adopt an adjacent county's ordinance;

B. Retains qualified staff per the adopted ordinance;

C. Enters into an intergovernmental agreement with the **District**; and

D. Administers and enforces the adopted ordinance per the requirements of the adopted ordinance.

3. A **multi-county municipality** that has satisfied §207.2 and entered into an intergovernmental agreement with the **District** is still required to obtain a **Watershed Management Permit** from the **District** for all **development** activities specified in §201.2.A,B,C,D,G, and H.

4. A **Watershed Management Permit** shall be required from the **District** for all **development** activities specified in §201.1 and §201.2 of this **Ordinance** within a **multi-county municipality** that has not entered into an intergovernmental agreement with the **District**.

§ 208. Amendments

Amendments to this **Ordinance** shall become effective when adopted by the **District's Board of Commissioners**.

§ 209. Effective Date

This **Ordinance** shall be effective on May 1, 2014.

ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

§ 300. General Requirements and Limitation

1. The **District** shall establish permit fees, which are contained in Appendix F of this **Ordinance**. Fees shall be based upon the costs the **District** incurs for all aspects of the permitting process, including inspections.

2. The **Watershed Management Permit** submittal shall include an opinion by a **Professional Engineer** that the technical submittal meets the criteria required by this **Ordinance**. In addition:

   A. The **site stormwater** plan shall include the signature and seal of a **Professional Engineer**;

   B. The design of **stormwater facilities**, calculations for the determination of the 100-year **floodplain** and **regulatory floodplain**, and calculations of the impact of **development** shall meet the standards of this **Ordinance** and shall be prepared, signed, and sealed by a **Professional Engineer**;

   C. If **wetlands** are located on the **site** or within one hundred (100) feet of the **site**, a survey locating the **wetland** in plan view, including the **wetland buffer** in accordance with §603 of this **Ordinance**, shall be signed and sealed by a **Professional Engineer** or a **Professional Land Surveyor**; and

   D. If **riparian environments**, in accordance with §606 of this **Ordinance**, are located on the **site** or within one hundred (100) feet of the **site**, a survey in plan view of the channel or stream and associated **riparian environment** shall be signed and sealed by a **Professional Engineer** or a **Professional Land Surveyor**.

3. All required topographic information shall be tied to the North American Vertical Datum of 1988 based on national map standard accuracy.

4. Prior to commencing construction, the **co-permittee** shall secure all appropriate approvals from federal, state, and regional authorities or their designee, including, but not limited to, **OWR**, the **Corps**, **IEPA**, and **FEMA**.

5. **Co-permittees** proposing runoff at a location on or adjacent to holdings or property of Forest Preserve District of Cook County (FPD) shall contact FPD for review of the proposed work to determine **stormwater** impacts to FPD property and methods to reduce or eliminate any adverse impacts. Refer to the **TGM** for further details.

6. The issuance of a Watershed Management Permit does not:

   A. Convey any property rights or any exclusive privilege;

   B. Authorize any injury to private property or invasion of private rights; or

   C. Release the **permittee** or **co-permittee** from liability for damage to **persons** or property resulting from the work covered by the permit.

7. Either the **District** or relevant **authorized municipality** shall make the final determination that all pertinent information is submitted by the **co-permittee** to allow for **Watershed Management Permit** review and/or issuance. Additional information or calculations may be requested from the **co-permittee** by either the **District** or **authorized municipality** to ensure compliance with this **Ordinance**.

8. Both the Cook County Land Bank Authority and the South Suburban Land Bank and Development Authority offer opportunities for the **District** to work with neighborhoods, **Cook County**, and local governments to determine neighborhood level best practices for **stormwater** and **flood** mitigation management that can be combined with both the Cook County Land Bank Authority's mission and the South Suburban Land Bank and Development Authority's mission to return vacant and abandoned homes and land back into productive and sustainable community assets.

§ 301. Watershed Management Permit Application and Submittals

The **Watershed Management Permit** application and submittal shall include permit schedules A, B, and C, and all of the following when applicable:

1. The name(s), original signature(s), and legal address(es) of the **co-permittee(s), permittee,** and of the **owner(s)** of the land, according to the following;

   A. For parcels located within a municipality's corporate limits, both the **co-permittee(s)** and **permittee** must sign the **Watershed Management Permit** application;

   B. For parcels located in unincorporated areas, the **co-permittee(s)** must sign the permit and the **permittee** (Cook County) is requested to sign the permit. If the **permittee** refuses to sign the **Watershed Management Permit**, it should decline in writing, and the **co-permittee** must comply with the following requirements;

      (1) For projects which include **qualified sanitary sewer** work without a **permittee**, the **Watershed Management Permit** may be issued under a **sole permittee** status, and must demonstrate all of the following:

(a) Evidence of responsibility, as determined by the **District's Board of Commissioners**;

(b) The facilities to be served are for the sole and exclusive use of the property **owner**, and no sewer extension is contemplated for other private users;

(c) The area to be served is outside the jurisdiction of any local sanitary district or public utility company certified for such service;

(d) Compliance with the administrative requirement as outlined in the **TGM**.

(2) For projects that involve stormwater management without a **permittee**, the **Watershed Management Permit** may be issued without **sole permittee** status, and must adhere to the additional maintenance requirements in §902 of this **Ordinance**. The permit must be recorded with the Cook County Recorder of Deeds according to §309 of this **Ordinance**.

2. The common address and legal description of the **site** where the **development** will take place;

3. A general narrative description of the proposed **development** that shall include:

   A. Type of **development**;

   B. Total **parcel** or **site** size; and

   C. Size of area under **development**;

4. Affidavit(s) signed by the **co-permittee(s)** attesting to:

   A. The understanding of the requirements of and intent to comply with this **Ordinance**;

   B. Disclosure of property **interests** (Schedule K) stating the aggregate total area of said property and all other lands **contiguous** to said property in which the **owner** holds an **interest** less than the thresholds stipulated under Table 2 in Article 5 of this **Ordinance**; and

   C. Acknowledgement of Schedule L, which provides notice that any **parcel** areas not being developed under a **Watershed Management Permit** must comply with detention requirements if future **development** occurs.

5. A statement of opinion by either a **Professional Engineer** or **Wetland Specialist** either denying or acknowledging the presence of **flood protection areas**:

A. Within the area of the **development**;

B. On the **site**;

C. 100 feet beyond the area of the **development** if not included within the **site**; and

D. The appropriate submittals identified in this Article if the statement acknowledges the presence of **flood protection areas**;

6. Copies of other permits or permit applications as required, including any **FEMA LOMAs**, **LOMRs**, **LOMR-Fs**, **CLOMAs**, and **CLOMRs**;

7. The **Erosion** and **Sediment** Control Submittal specified in §302 of this **Ordinance** for any **development** requiring a **Watershed Management Permit**;

8. The **Stormwater** Management Submittal specified in §303 of this **Ordinance** for any **development** requiring a **Watershed Management Permit**;

9. The **Floodplain** Submittal specified in §304 of this **Ordinance** for **development** associated with a **floodplain** designated in §601 of this **Ordinance**;

10. The **Wetland** Submittal specified in §0 of this **Ordinance** for any **development** associated with a **wetland** designated in §603 of this **Ordinance**;

11. The Riparian Submittal specified in §306 of this **Ordinance** for any **development** associated with a **riparian environment** designated in §606 of this **Ordinance**;

12. The Sewer Construction Submittal specified in §307 of this **Ordinance** for any **development** associated with **qualified sewer construction** designated in Article 7 of this **Ordinance**;

13. All applicable maps specified in §308.1 of this **Ordinance,** and;

14. **Maintenance** and Monitoring Plan Submittal specified in §310 of this **Ordinance.**

§ 302. Erosion and Sediment Control Submittal

The **Erosion** and **Sediment** Control Submittal shall include permit Schedule P and require the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with §308.4 of this **Ordinance**;

2. An **erosion** and **sediment** control plan that describes all measures appropriate for the **development** such that all the requirements of Article 4 of this **Ordinance** are met.

This plan shall include:

A. A narrative description of the existing land cover, hydrologic conditions of the proposed **development,** and areas adjacent to the **development** including a description of any **flood protection areas**, **site** discharge location(s), points of discharge to **Jurisdictional Waters of the U.S.**, and soil survey data;

B. The **NPDES** ILR-10 permit number issued by **IEPA** to the **co-permittee** upon submittal of the ILR-10 Notice of Intent permit application or permit;

C. A narrative description of the proposed temporary **erosion and sediment control practices**, including a narrative describing how **flood protection areas** will be protected from **erosion** and **sedimentation**;

D. A schedule of construction activities including, but not limited to, clearing and grading, installation of **stabilized** construction entrances, disposal of construction waste, stockpiling, and inspection and **maintenance** of all **erosion and sediment control practices**;

E. A narrative describing how **flood protection areas** will be protected from **erosion** and **sedimentation**;

F. Data and calculations used to size, locate, design, and maintain all **erosion and sediment control practices**, and the design of temporary stream crossings; and

G. A mechanism for ensuring that the **erosion** and **sediment** control installation and **maintenance** requirements for both temporary and permanent measures will be met, including the list of **maintenance** tasks and performance schedules that have been identified and/or required in the plan sheet(s) and specifications.

§ 303. Stormwater Management Submittal

The **Stormwater** Management Submittal shall include the appropriate permit Schedule D and require the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with §308.1, §308.2, §308.3, and §308.5 of this **Ordinance**;

2. The **site runoff** plan for the **development** that describes all appropriate measures necessary to meet the requirements of §502 of this **Ordinance**. This plan shall include:

   A. A narrative description of the existing drainage pattern that shall include:

(1) The portion of the **parcel(s)** that is located in a **separate sewer area**;

(2) The portion of the **parcel(s)** that is located in a **combined sewer area**;

(3) The **parcel(s)** and **site** discharge point(s) to a **storm sewer** or **waterway**; and

(4) The **parcel(s)** and **site** discharge point(s) to a **combined sewer**;

B. A narrative description of the proposed **development** that shall include:

(1) Area in acres of existing **impervious areas**; and

(2) Area in acres of proposed **impervious areas**;

C. A narrative description of the upstream **tributary area** to allow for evaluation of offsite impacts resulting from the proposed **development**;

D. **Stormwater** calculations comprised of **site runoff** and upstream tributary **runoff** calculations. Such **stormwater** calculations must include the following as applicable:

(1) Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions for sizing both **major and minor stormwater systems**;

(2) Time of concentration calculations as required in Article 5 of this **Ordinance**;

(3) Curve number calculations for existing and proposed conditions;

(4) Calculations for sizing **storm sewer** systems;

(5) Delineation of areas tributary to each **stormwater facility**, overland flow route, and storage facility;

(6) Hydraulic grade line and water surface elevations under both design flow and **base flood** conditions;

(7) Calculations for sizing overland flow routes, ditches, channels, and swales;

(8) Cross section data for open channels;

(9) Profile drawings for open channels and sewers;

(10) Assumptions or calculations utilized to determine tailwater conditions for the **site**; and

(11) Other calculations necessary to demonstrate compliance with this **Ordinance**;

E. Determination of the **BFE** and **FPE**, including the source of the determination, in accordance with §601 of this **Ordinance**.

3. A volume control plan that describes all measures appropriate for the **development** in accordance with §503 of this **Ordinance**. This plan shall include:

A. Calculations of **impervious area** and the associated volume required for the **volume control practices**;

B. Narrative description of likely water quality impacts based upon proposed **development** land use;

C. Description of soils that shall include:

(1) Infiltration rates;

(2) Percentage of clay; and

(3) Depth to water table, bedrock, or limiting layer.

D. Narrative description of the utilization of the **volume control practices** hierarchy in §503.3.A-C of this **Ordinance**, including use of **retention-based practices, offsite volume control practices,** and **flow-through practices** in §503.3.A and §503.3.B, and for **impervious area** reduction in §503.3.C of this **Ordinance**;

E. Calculations of the quantifiable storage provided in each proposed **retention-based practice(s)** in §503.3 of this **Ordinance** to verify adequate storage;

F. Calculations to demonstrate that the chosen **flow-through practice(s)** in §503.3 of this **Ordinance** will treat the targeted water quality impacts; and

G. Calculation of **impervious area** reduction in §503.3 of this **Ordinance**, if applicable.

4. A **detention facility** plan that describes all measures appropriate for the **development** in accordance with §504 of this **Ordinance**. This plan shall include:

A. Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions and to determine the post-**development allowable release rate** and related storage volume;

B. Elevation versus storage area curve and associated calculations for **detention facility**;

C. Elevation versus discharge curve and associated calculations for the outlet works of the storage system;

D. Calculations demonstrating that the overflow **structure** and overflow path are sized in accordance with §504.11.C of this **Ordinance**; and

E. Assumptions or calculations utilized to determine tailwater conditions for the **site** in accordance with §504.13.B of this **Ordinance**.

§ 304. Floodplain Submittal

The **Floodplain** Submittal shall describe all measures appropriate for the **development** in accordance with Article 6 of this **Ordinance**. This submittal shall include permit Schedule H and the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with §308.5 of this **Ordinance**;

2. A determination of the **BFE**, including the source of the determination, in accordance with §601.4 of this **Ordinance**;

3. A determination of the **FPE**, including the source of the determination, in accordance with §601.9 of this **Ordinance**;

4. A narrative description of proposed **development** within the limits of the **regulatory floodplain** and **regulatory floodway**;

5. A determination from the **permittee** of whether the **development** constitutes a **substantial improvement**;

6. A narrative discussion and details of **floodproofing** measures including material specifications, construction methods, and calculations;

7. **Floodplain** fill and **compensatory storage** calculations in accordance with §602.7, §602.8, and §602.9 of this **Ordinance** that shall include:

   A. Cross section profiles of the **floodplain** fill and **compensatory storage**;

   B. A plan view delineating the location of cross sections; and

C. Tabular summary showing fill below and above the existing 10-year **flood** elevation and cuts below and above the proposed 10-year **flood** elevation;

8. Revisions to **FIRM(s)** including all hydrologic and hydraulic calculations, modeling, and all **CLOMR**/**LOMR** applications;

9. A copy of the **Cook County FIS Floodway** Data Table; and

10. For **development in the regulatory floodway**, the following calculations or analyses shall be submitted to demonstrate compliance with §602.25 of this **Ordinance**:

    A. Existing and proposed hydrologic and hydraulic analysis (land use and stream systems);

    B. Tabular summary of existing and proposed flows, **flood** elevations, and **floodway** velocities for the 2-year, 10-year, and 100-year **storm event**;

    C. All calculations used in hydrologic and hydraulic modeling;

    D. Input and output for hydraulic and hydrologic computer models;

    E. Plan view drawing locating all cross sections utilized within the hydraulic and hydrologic computer models;

    F. **Flood** damage analyses for the replacement or modification of existing culverts, bridges, or impoundments;

    G. Hydraulic analyses of new, modified, or replacement bridges or culverts; and

    H. Transition sections as required in §602.28 of this **Ordinance**; and

    I. Analyses of hydrologically and **hydraulically equivalent compensatory storage**; and

11. Copies of any of the following forms of correspondence from the **OWR**:

    A. A letter of no objection stating that no **OWR** permit is necessary; or

    B. A copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters"), signed by the **co-permittee**, and all associated correspondence submitted to and received from **OWR**.

§ 305. Wetland Submittal

The **Wetland** Submittal shall describe all measures appropriate for the **development** in accordance with Article 6 of this **Ordinance**. This submittal shall include permit Schedule W and the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with §308.7 of this **Ordinance**;

2. The **isolated wetland submittal** for a **standard isolated wetland** that includes **contiguous isolated waters** less than one-tenth of an acre (0.10 acre) in aggregate shall include the following:

   A. An **isolated wetland** delineation report containing the following:

      (1) A delineation of the **wetlands** consistent with the requirements for **wetland** delineation provided in §603 of this **Ordinance**;

      (2) A statement indicating date of boundary verification by the **District**;

      (3) All **Corps** "Routine Wetland Determination Data Form(s);" and

      (4) Mapping products in accordance with §308 of this **Ordinance**;

   B. Copies of the following forms of correspondence from the **Corps**:

      (1) A **jurisdictional determination** from the **Corps** indicating that the impacted **wetland** is not under the jurisdiction of the **Corps**; or

      (2) A Letter of No Objection stating that no permit from the **Corps** is necessary; and

      (3) If required by the **Corps**, a Section 404 permit application, all associated correspondence, and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the **co-permittee**;

3. The **isolated wetland submittal** for a **high quality isolated wetland** or a **standard isolated wetland** equal to or greater than one-tenth of an acre (0.10 acre) in aggregate shall contain the following:

   A. An **isolated wetland** delineation report containing the following:

      (1) A narrative describing the location, type, functions, and size of all **wetlands** and **wetland buffers** on the **site**;

      (2) A statement indicating date of boundary verification by the **District**;

(3) A delineation of the **isolated wetlands** consistent with the requirements for **wetland** delineation provided in §603 of this **Ordinance**;

(4) A classification of each onsite **isolated wetland** as either a **high quality isolated wetland** or a **standard isolated wetland**, including a narrative detailing the results of the assessment of specific functions and values;

(5) All **Corps** "Routine Wetland Determination Data Form(s);"

(6) An assessment to determine the **Swink and Wilhelm Floristic Quality Index (FQI)** and **mean coefficient of conservatism (ĉ)**, carried out within the growing season for all **wetlands** on the **site**;

(7) Photos of all **wetlands** and **wetland buffers** on the **site**;

(8) An Illinois Department of Natural Resources (IDNR) threatened and endangered species consultation;

(9) A United States Fish and Wildlife Service (USFWS) threatened and endangered species consultation; and

(10) Mapping products in accordance with §308 of this **Ordinance**;

B. Copies of the following forms of correspondence from the **Corps**:

(1) A **jurisdictional determination** from the **Corps** indicating that the impacted **wetland** is not under the jurisdiction of the **Corps**; or

(2) A Letter of No Objection stating that no permit from the **Corps** is necessary; and

(3) If required by the **Corps**, a Section 404 permit application, all associated correspondence, and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the **co-permittee**;

C. For impacts to **high quality isolated wetlands**, documentation must be provided indicating that the proposed amount of impact represents the least amount of impact required to allow for an economically feasible use of the **parcel**, and documentation shall be provided indicating that:

(1) The presence of **high quality isolated wetlands** precludes all economically feasible uses of the **site** and no practicable alternative to **wetland** modification exists; and/or

(2) Avoidance of **high quality isolated wetlands** would create a hazardous road condition and no practicable alternative to **wetland** modification exists;

D. For impacts to **standard isolated wetlands** with a total acreage greater than or equal to one-tenth of an acre (0.10 acre) in aggregate, documentation must be provided indicating that no practicable alternative to **wetland** modification exists;

E. An evaluation of the indirect impacts to **isolated wetlands** on the **site** and **wetlands** 100 feet beyond the area of the **development** if not included within the **site**;

F. For impacts to **isolated wetland buffers**, documentation must be provided that describes how the impacted buffer functions and how its values will be mitigated. **Isolated wetland buffer** impacts may be mitigated via replacement or enhancement of impacted functions and values, or through buffer averaging;

G. If mitigation is required, a **wetland mitigation** document must be developed in accordance with §310.4 and a plan in accordance with §308.7 of this **Ordinance**; and

H. If mitigation is to be provided via a **wetland mitigation bank**, a statement of obligation from the **wetland mitigation bank** showing mitigation acreage reserved for the project; and

4. Prior to construction, the **co-permittee** shall submit all relevant federal, state, and local permits.

§ 306. Riparian Environment Submittal

The **Riparian Environment** Submittal shall describe all measures appropriate for the **development** in accordance with Article 6 of this **Ordinance**. This submittal shall include either Schedule W or Schedule H and the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with §308.8 of this **Ordinance**;

2. An inventory of the functions of the **riparian environments** in accordance with §606.1 of this **Ordinance**;

3. A delineation of the **riparian environments** in accordance with §606.2 of this **Ordinance**;

4. For impacts to **riparian environments**, documentation must be provided that describes the impacted riparian functions and how their values will be mitigated. **Riparian environments** impacts may be mitigated via replacement or enhancement of impacted functions;

5. For impacts to a **Jurisdictional Waters of the U.S.**, provide copies of any of the following forms of correspondence from the **Corps**:

   A. A **Jurisdictional Determination** from the **Corps** indicating that the impacted waters are isolated;

   B. A Letter of No Objection stating that no permit is necessary; or

   C. A Section 404 permit application from the **Corps**, all associated correspondence and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the **co-permittee** or agent;

6. For channel relocation, include documentation indicating that the length of the mitigated channel is equal to or greater than the length of the disturbed channel; and

7. If mitigation is required, a **riparian environment** mitigation document must be developed in accordance with §310.5 and a plan in accordance with §308.8 of this **Ordinance**.

§ 307. Sewer Construction Submittal

The Sewer Construction Submittal shall describe and delineate all measures appropriate for installing **qualified sewer construction** in accordance with Article 7 of this **Ordinance**. In all cases permit Schedules A, B, and C should be submitted. This submittal shall include the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with § 308.1 and §308.6 of this **Ordinance**;

2. All **District** required general notes, approved material and applicable standard **qualified sewer construction** details available from the **TGM**;

3. All applicable **District** details, technical requirements, and design guidelines for **qualified sewer construction** available from the **TGM**;

4. Population Equivalency (PE) calculations for expected sewer flows based on new or expanded **development**;

5. Service area and future service area exhibits along with supporting population calculations;

6. A narrative description of any live sewer connection or live sewer bypass protocol;

7. Characteristic of waste for onsite treatment or pre-treatment of **industrial wastes** including:

   A. Completed **Watershed Management Permit** forms Schedule F & G; and

   B. Narrative of wastes being generated, treatment process, and flow loading;

8. **District** Direct Connection information, including:

   A. Completed permit form Schedule O;

   B. Clearly label all **District** owned sewers and **structures** on the plans;

   C. Provide clearance distances for all proposed excavation within 15 feet of **District** sewers and **structures**;

   D. Provide sewer construction notes associated with construction in proximity of **District** facilities (available from the **TGM**);

   E. Provide required **District** direct connection detail (available from the **TGM**);

   F. Provide narrative(s) of excavation protocol in proximity to **District structure**; and

   G. Provide shoring calculations certified by a structural engineer for any deep excavation in proximity of **District** facilities;

9. **Outfall** Connection details including:

   A. Completed permit form Schedule O;

   B. Clearly label proposed **outfall** location on the plans;

   C. Provide **District outfall** general notes (available from **TGM**);

   D. Provide construction details for the proposed **outfall**; and

   E. Provide construction details of **stormwater** quality interceptor; and

10. Other calculations necessary to demonstrate compliance with this **Ordinance**.

§ 308. Maps, Exhibits and Plan Sheets Submittal

Depending on the complexity of the proposed **development** combining plan sheets is desirable if information provided on all plan sheets is clear, specific, and legible. The Maps, Exhibits, and Plan Sheets Submittal shall include the following when applicable:

1. Mapping products, with the project location indicated, shall include where applicable and where available:

    A. Location map to scale displaying the route and **ownership** of storm drainage from the **development** to the receiving **waterway** or **combined sewer**;

    B. Location map to scale displaying the route and **ownership** of sanitary flow from the **development** through the local sewer system(s) to the receiving **District** interceptor or facility;

    C. United States Geological Survey (USGS) topographic map;

    D. Natural Resources Conservation Service (**NRCS**) soils map noting hydric soils;

    E. **Cook County FIRM**;

    F. **National Wetland Inventory (NWI)**;

    G. Aerial photo of the **site**;

    H. Aerial photo showing onsite **wetland** and offsite **wetland** boundaries and locations of delineation data points; and

    I. Historical aerial photographs, USGS hydrological atlas, or **NRCS wetland** inventory maps;

2. Plan sheet(s) and exhibits that shall contain the following:

    A. North arrow;

    B. Scale of at least one inch to 100 feet or less (e.g., one inch to 50 feet);

    C. Legend;

    D. Property and/or **parcel** lines; and

    E. Date of original preparation and any revisions;

3. A **drainage area** exhibit that shall include:

A. A vicinity topographic map covering the entire upstream **watershed** that drains to or through the **site** and the entire **watershed** downstream to the point of known or assumed discharge and water surface elevation on the **site**;

B. Top of foundation elevations and overland flow paths on properties located directly downstream of and adjacent to the proposed **site**; and

C. A plan view drawing of existing and proposed **stormwater facilities** at the same scale as the vicinity topographic map that shall include:

(1) **Watershed** boundaries for areas draining through or from the **development**;

(2) The location of the **development** within the **watershed planning area**; and

(3) Soil types, vegetation, and land cover conditions affecting **runoff** upstream of the **development site** for any area draining through or to the **site**;

4. An **erosion** and **sediment** control plan sheet(s) at the same scale as the **stormwater** management plan sheet(s) that shall include:

A. Existing contours with drainage patterns and clearly delineated **watershed** boundaries tributary to the **site**;

B. Location of **flood protection areas** and vegetated areas for the **development** that are to be preserved or avoided;

C. Proposed contours, locations of **waterways**, and the location of **erosion and sediment control practices**;

D. The **drainage area** tributary to each **erosion and sediment control practice** delineated on the drawing;

E. A schedule of construction activities including, but not limited to, clearing and grading of the **site**, installation of **stabilized** construction entrances, disposal of construction waste, stockpiling, and **maintenance** of all **erosion and sediment control practices**;

F. Design details for proposed **erosion and sediment control practices**; and

G. Identification of **person(s)** having legal responsibility for installation, **maintenance**, and removal of **erosion and sediment control practices** during construction and after **development** is completed;

5. The **stormwater** management plan sheet(s) shall include the following:

A. An existing conditions plan sheet(s) that shall contain the following:

(1) Benchmark location and information;

(2) A delineation of any pre-development **regulatory floodplain** and **regulatory floodway** on the **site**;

(3) A **wetland** delineation of all **Jurisdictional Waters of the U.S.**, including **wetlands**, both on the **site** and extending one-hundred (100) feet beyond the **site**;

(4) A delineation of any **riparian environments** on the **site**;

(5) Existing contours on entire **site** and 50 feet beyond the **site**;

(6) Minimal contour intervals of one foot for both existing and proposed contours;

(7) Top of foundation, **lowest floor**, **lowest entry elevation**, and **floodproofing** elevations of all existing **structures** within 100 feet of the **development** area;

(8) Existing **structures**, parking lots, driveways, sidewalks, pathways, trails, and other **impervious areas** on the **site**;

(9) All existing **stormwater facilities** including pipes, field tile, culverts, and inlets on entire **site** and 50 feet beyond the **site**. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type shall be provided;

(10) Existing utilities including sanitary, storm, water main, or any other utilities that exist on the **site**. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type shall be provided; and

(11) Existing trees and vegetation areas on the **site**;

B. A utility and geometry plan sheet(s) shall contain the following:

(1) Delineated limits of any **flood protection areas** on the **site**;

(2) The **FPE(s)** shall be specified, as appropriate;

(3) All existing and proposed impervious surfaces such as roadways, **structures**, parking lots, driveways, sidewalks, pathways, trails, or any other impervious surfaces;

(4) All top of foundation elevations for existing and proposed **structures**;

(5) All existing and proposed **lowest entry elevations** of any **structures** within a **regulatory floodplain** on the **site** or on adjacent property;

(6) All existing and proposed **lowest entry elevations** of any **structures** adjacent to a **stormwater facility**;

(7) All existing and proposed **stormwater facilities** including pipes, field tile, culverts, and inlets, including rim and invert elevations, pipe sizes, pipe lengths, and material type;

(8) Existing and proposed utilities including sanitary, storm, water main, electric, television cables, gas or any others that exist on the **site**. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type should be provided;

(9) Design details for all proposed **stormwater facilities** including, but not limited to, **major and minor stormwater systems**, storage basins, **detention facilities**, **volume control practices**, and outlet works including restrictor size and invert;

(10) Delineated limits of the **base flood** condition from new or adjacent **detention facilities**;

(11) Location of all **volume control practices**;

(12) Downspout and sump pump discharge line locations and directions. Outlets should be outside the limits of **flood protection areas**; and

(13) Location and limits of all easements;

C. A grading plan sheet(s) that shall contain the following:

(1) Delineated limits of any **flood protection areas** on the **site**;

(2) Existing and proposed contours of the entire **site** and 100 feet beyond the **site**;

(3) Existing and proposed spot elevations demonstrating drainage patterns;

(4) **Major and minor stormwater systems** that shall include:

(a) All existing and proposed **stormwater** facilities;

(b) All existing and proposed **volume control practices**;

(c) All existing and proposed **base flood** conditions for the **major stormwater system**;

(d) All existing and proposed overland flow routes;

(e) Stage-storage-discharge table for **detention facilities**;

(f) Design details for proposed **stormwater** facilities including, but not limited to, major and **minor stormwater systems**, storage basins, **volume control practices**, and outlet works including restrictor size and invert; and

(g) **Drainage area** to all proposed **stormwater facilities;**

(5) **A delineation** of the pre-development and post-development **regulatory floodplain** and **regulatory floodway** in accordance with §601 of this **Ordinance**;

(6) Topographic survey drawings of all existing and proposed **structures** located on or within 100 feet of the **site** including the **lowest floor**, **lowest entry elevation**, and **floodproofing** elevations;

(7) Plan view of locations of cross sections utilized to compute **compensatory storage**; in addition, the cross sections should be plotted on the plans or in the **stormwater** management submittal at a scale such that the reviewer can verify quantities;

(8) Location of cross sections and any other hydrologic or hydraulic computer-modeled features;

(9) **Volume control practices**; if native plantings are required this shall be shown on a separate planting plan;

(10) Delineation of all **unrestricted areas**;

(11) Delineation of all **native planting conservation areas**; and

(12) Delineation of all **disturbed areas**;

6. The utility plan sheet(s) for **qualified sewer construction** shall include the following:

A. A utility plan sheet(s) shall contain the following:

(1) Benchmark location and information;

(2) Existing **structures**, parking lots, driveways, sidewalks, pathways, trails, and other **impervious areas** on the **site**;

(3) All top of foundation elevations for existing and proposed **structures**;

(4) All proposed **qualified sewer construction** information including:

(a) **Qualified sewer** manhole, cleanout or other **structure** information including rim, and invert elevation (each labeled by compass direction), with a unique clearly labeled identifier;

(b) **Qualified sewer** pipe size, length, material, and slope, clearly labeled as proposed;

(c) At the upstream **building** connection, estimated sewer invert;

(d) At the downstream point of connection, estimated invert, size, slope, and flow direction of the existing sewer;

(e) Utility crossing information and call outs, including pipe-to-pipe clearance distance, for all water main and water service intersections along the proposed alignment; and

(f) **Qualified sewer** manhole, **structure** lid cover type where appropriate (within HWL or **BFE**);

(5) All existing sanitary and **combined sewer** pipe and **structure** information including pipe size, invert and rim elevation, flow direction, material type, and **ownership**;

(6) All existing sanitary and **combined sewer** pipe and **structure** to be demolished or abandoned, including septic systems;

(7) All existing and proposed water main and water service rim and invert elevations, and the location of all fire hydrants and valves;

(8) Existing and proposed utilities including, electric, television cables, gas or any others that exist on the **site**. Information regarding the invert and rim elevations, pipe sizes should be provided;

(9) All existing and proposed **stormwater facilities** including pipes, field tile, culverts, and inlets, including rim and invert elevations, pipe sizes, pipe lengths, and material type;

(10) Location of all **volume control practices** and **major stormwater systems**;

(11) All proposed and existing downspout and sump pump discharge line locations and directions except for **residential subdivision development**. Outlets should be located outside the limits of **flood protection areas**;

(12) Delineated limits of any **flood protection areas on the site**;

(13) The **BFE** and **FPE(s)** shall be specified in accordance with §601 of this **Ordinance**, as appropriate;

(14) Location and limits of all easements; and

(15) Locations of existing trees and vegetation areas along the alignment;

B. The plan and profile for public **qualified sewer** main **construction** shall include the following (when applicable)**:**

(1) Profile views or all proposed public **qualified sewer** main **construction** depicted on the same sheet as an accompanying plan view;

(2) Profiles shall follow the alignment of public **qualified sewer** main **construction** if substantially different from the centerline of a **right-of-way** alignment;

(3) Proposed size, length, slope, material and class of pipe for all proposed public **qualified sewer** main **construction**;

(4) A unique line type to distinguish between proposed and existing sewer systems;

(5) **Structure** rim and invert elevations (labeled by compass direction) for all proposed **qualified sewer construction** along with a unique identifier;

(6) Horizontal and vertical scale [exaggeration as appropriate to show detail];

(7) Utility crossings with vertical distance between proposed **qualified sewer** and existing or proposed utility;

(8) Existing ground profile (and bedrock when applicable);

(9) Profile stationing to coincide with plan stationing;

(10) Match line when profile covers more than one page; and

(11) For large or complex projects, an insert map indicating immediate plan limits within the overall project.

C. The lift station plan, profile, and schematic shall include the following (when applicable):

(1) Completed **Watershed Management Permit** form Schedule E;

(2) Lift station and wet well plan and profile, including:

(a) Critical pump operation elevations (pump off, pump on, etc.);

(b) Pump installation elevation;

(c) **Structure** rim Elevation; and

(d) Initial Check valve and air/vacuum relief valve;

(3) Force main profile, including:

(a) Location of check valve(s);

(b) Location of combination air/vacuum relief valve(s) along the alignment; and

(c) Stream or **waterway** crossing(s) and crossing provisions;

(4) Pump detail (manufacturer cut sheet) indicating specified horse power and impeller type;

(5) Lift station construction details;

(6) Lift station service area map;

(7) Calculations for lift station design including:

(a) Design population including average and peak flow;

(b) Narrative for basis of lift station design population (service area or actual flow monitoring data);

(c) Force main pipe friction and design head losses;

(d) Wet well capacity, cycle time, detention time;

(e) Narrative of alternative power source;

(f) System curve and pump performance curve; and

(g) The logic of the Programmable Logic Controller, including pump operation elevations.

7. The **wetland** plan sheet(s) shall include:

A. In plan view, the location of **wetland** and **wetland buffer** on or within 100 feet of the **site**, based upon a survey of the **wetland** delineation in accordance with §603 of this **Ordinance**;

B. Acreage and area of proposed impact to **wetland** or **wetland buffer**; and

C. A proposed **wetland mitigation** that meets the requirements of §604 of this **Ordinance**, if **wetland** or **wetland buffer** impacts are proposed; the proposed **wetland mitigation** plan sheet(s) shall include the following:

(1) Location and acreage of proposed **wetland mitigation**;

(2) Soil locations and soil management activities;

(3) Planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;

(4) **Hydrology** monitoring equipment locations;

(5) Schedule of earthwork, planting, **maintenance**, and monitoring;

(6) Temporary and permanent access locations; and

(7) Applicable **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity;

8. The riparian plan sheet(s) shall include:

A. Location of **riparian environments** located on **site**, based upon a survey of the Ordinary High Water Mark (**OHWM**) of the channel or stream and associated **riparian environment**, in plan view;

B. Acreage and area of proposed impact to **riparian environments** as defined in §607.3 of this **Ordinance**; and

C. Proposed **riparian environment** mitigation plan that meets the requirements of §607 of this **Ordinance**, if riparian mitigation is required. The proposed **riparian environment** mitigation plan sheet(s) shall include the following:

(1) A plan and profile of the existing and proposed channel showing the channel width, depth, sinuosity, and location of in-stream **structures**;

(2) Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;

(3) Schedule of earthwork, planting, **maintenance**, and monitoring;

(4) Temporary and permanent access locations; and

(5) Applicable **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity; and

9. The recording plan sheet(s) shall include:

A. Location of all existing and proposed **detention facilities** to meet **District stormwater storage** requirements and to ensure they are permanently sustained and adequately maintained by future **parcel owners**;

B. Location of any offsite, trade-off **detention facilities** to meet **District stormwater storage** requirements not located on the **parcel** and to ensure they are linked to the permitted **parcel development** and permanently sustained and adequately maintained by future/alternate **parcel owners**;

C. Location of all existing and proposed **volume control practices** to meet **District volume control** requirements and to ensure they are permanently sustained and adequately maintained by future **parcel owners**;

D. Entire **parcel** area for phased **development** providing notice of **stormwater** detention storage requirements for undeveloped portions of a **parcel** now developed in part under the WMO;

E. A sewer utility plan for **parcels** outside the territorial boundaries of a **municipality** delineating any **qualified sewer construction** to be maintained by the **co-permittee** in the event that the Township or County is unwilling or unable to do so;

F. Location of all **wetland and riparian mitigation areas** provided to meet **District** mitigation requirements and to ensure they are permanently sustained and adequately maintained by future **parcel owners**;

G. Location of all native or natural planting areas to ensure they are permanently sustained and remain as native or natural planting areas by future **parcel owners**; and

H. Location of all **qualified sewer construction** for **parcels** in unincorporated areas, to ensure sewer systems are permanently sustained and adequately maintained by future **parcel owners** in the event the **permittee** (**Cook County** or other non-municipal entity) is unwilling or unable to do so.

§ 309. Recordation and Obligations of a Watershed Management Permit

1. The **Co-Permittee** is responsible for ensuring the recording submittal defined in §308.9 of this **Ordinance** is recorded with the Cook County Recorder of Deeds.

2. At the expense of the **Co-Permittee**, the **District** may record the recording submittal specified under §308.9 of this **Ordinance**, together with the appropriate permit form (Schedule R) with the Cook County Recorder of Deeds.

3. The **Director of Engineering** may record the **Watershed Management Permit** and any amendments thereto with the Cook County Recorder of Deeds.

4. Obligations imposed under a recorded **Watershed Management Permit** shall continue for the useful life of the subject **development** or **qualified sewer construction**.

§ 310. Maintenance and Monitoring Plan Submittal

The **maintenance** and monitoring plan submittal shall describe all measures appropriate for the **development** during the construction phase such that requirements of Article 4, Article 5, Article 6, and Article 7 are met, and for the post-construction phase such that all the requirements of Article 9 of this **Ordinance** are met. Such submittal shall include the following when applicable:

1. A schedule of implementation of the **erosion** and **sediment** control plan including, but not limited to:

   A. A statement that installation of **erosion and sediment control practices** will occur prior to any soil disturbance;

   B. A schedule for construction activities, including **stabilized** construction entrance installation, **sediment** trapping facility installation, **site** clearing, stockpiling, grading, construction waste disposal, temporary and permanent **stabilization**, and removal of temporary **erosion and sediment control practices**;

   C. A schedule for inspection, reporting, and maintenance of all erosion and

sediment control practices; and

D. Contact information for the party responsible for implementation and **maintenance** of the **site** soil **erosion** and **sediment** control plan;

2. A scheduled perpetual **maintenance** program for **stormwater facilities**, **volume control practices**, and **compensatory storage** including, but not limited to:

   A. Planned **maintenance** tasks and frequency of each task such as removal of **sediment**, debris, mowing and pruning of vegetation, and restoration of eroded areas;

   B. Identification of the responsible parties for performing the **maintenance** tasks; and

   C. A description of applicable temporary and permanent access and **maintenance** easements granted or dedicated to, and accepted by, a governmental entity.

3. A scheduled perpetual **maintenance** program for **qualified sewer construction** including, but not limited to:

   A. Planned **maintenance** tasks and frequency of each task for the removal of objectionable wastes, fats, oils and grease, or any **other wastes** collected in private pre-treatment or separator **structures**;

   B. Planned routine **maintenance** for all private lift station and pumping facilities;

   C. Operation **maintenance** agreements for all private **service sewers** providing service to multiple **owners**;

   D. Identification of the responsible parties for performing the **maintenance** tasks; and

   E. A description of applicable temporary and permanent access and **maintenance** easements granted or dedicated to, and accepted by, a governmental entity.

4. If **wetland mitigation** is required, a **wetland mitigation** document shall be developed in accordance with §604 of this **Ordinance**. This document shall include:

   A. Proposed **wetland hydrology** and an inundation and duration analysis;

   B. Proposed soils and soil management activities;

C. Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;

D. Proposed **maintenance** and monitoring plan with **maintenance activities** and performance criteria outlined;

E. Schedule of earthwork, planting, monitoring, and **maintenance**;

F. A plan for the continued management, operation, and **maintenance** of the **wetland mitigation** measures including the designation of funding sources and the person responsible for long-term operation and **maintenance**; and

G. A description of applicable temporary and permanent access and **maintenance** and conservation easements granted or dedicated to and accepted by a governmental entity; and

5. If riparian mitigation is required, a **riparian environment** mitigation document shall be developed in accordance with §607 of this **Ordinance**. This document shall include:

A. The proposed methods which will allow naturalizing to occur, such as meandering, pools, or riffles for relocated channels. Methods proposed are expected to be able to withstand all events up to the **base flood** without increased **erosion**;

B. The methods by which the normal flow within the channel will be diverted to construct the new or relocated channel;

C. The **erosion and sediment control practices** to be utilized to minimize and control **sediment** and degradation of downstream water quality;

D. The appropriate hydrologic and hydraulic methods analyzing the impacts on **flood** flows and **flood** elevations (to be provided in the **floodplain** and **floodway** submittal) meeting all other requirements in the **Ordinance**, including the **floodplain**/**floodway** requirements outlined in §601 and §602 of this **Ordinance**;

E. Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;

F. Proposed **maintenance** and monitoring plan with **maintenance activities** and performance criteria outlined;

G. Scheduling of earthwork, planting, **maintenance,** and monitoring;

H. A plan for the continued management, operation, and **maintenance** of the **riparian environment mitigation** measures, including the designation of funding sources and the **person** responsible for long-term operation and **maintenance**; and

I. A description of applicable temporary and permanent access and **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity.

§ 311. Record Drawings

1. Upon completion of **development**, **record drawings** of the **site stormwater** plan sheet(s), **volume control practices**, **detention facilities**, and **stormwater facilities** shall be submitted to the **District**. **Record drawings** shall consist of the following as necessary:

   A. Record topography with one foot contours;

   B. Record utility plans; and

   C. Cross sections.

2. All **record drawings** shall contain benchmark information and reference a vertical datum.

3. **Record drawing** calculations shall be required showing the as-built volume of **compensatory storage**. As-built **compensatory storage** volume calculations shall incrementally determine both cut and fill volumes within the **regulatory floodplain** as follows:

   A. Below the 10-year **flood** elevation; and

   B. Between the 10-year **flood** elevation and **BFE**.

4. **Record drawing** calculations shall be required showing the as-built volume of the **volume control practices**.

5. **Record drawing** calculations shall be required showing the as-built volume of the **detention facility**.

6. If the constructed grades, geometries, or inverts of **stormwater facilities**, **volume control practices**, or **detention facilities** are not in conformance with the approved plans, the **co-permittee** shall be responsible for any modifications required for compliance with this **Ordinance**.

7. **Record drawings** shall be prepared, signed, and sealed by a **Professional Engineer** or a **Professional Land Surveyor**. The record calculations shall be prepared, signed, and sealed by a **Professional Engineer**.

8. **Record drawings** of all **qualified sewer construction** with relevant dimensions and elevations.

§ 312. Terms of Permit/Denial - Appeal

1. Upon receipt of a complete **Watershed Management Permit** application, either the **District** or an **authorized municipality** may:

   A. Request clarifications or revisions from the **co-permittee**;

   B. Issue a **Watershed Management Permit**;

   C. Issue a **Watershed Management Permit** with special conditions in accordance with this **Ordinance**; or

   D. Deny the application for a **Watershed Management Permit**.

2. Any **co-permittee** aggrieved by the special conditions or denial of a **Watershed Management Permit** may appeal said denial or special conditions as specified in Article 13 of this **Ordinance**.

§ 313. Permit Fees

1. The **District** shall establish a schedule of permit fees in accordance with the provisions of this **Ordinance**, which may be amended from time to time. The Schedule of permit fees is included in Appendix F of this **Ordinance**.

2. An **authorized municipality** may establish a schedule of permit fees in accordance with the provisions of this **Ordinance**, which may be amended from time to time.

3. Fees shall be based upon the costs either the **District** or **authorized municipality** incurs for all aspects of the permitting process, including, but not limited to, review of permit applications and inspections.

4. A **co-permittee** shall pay all relevant permit fees at the time of application for a **Watershed Management Permit**. Permit fees shall be refunded if the permit application is cancelled subject to the conditions of §1401.3 of this **Ordinance**. Base fees, and other completed review fees, are considered non-refundable. See Appendix F of this **Ordinance** for a schedule of permit fees.

§ 314. Construction Timeline Requirements and Approval of Plan Revisions

1. Construction activities authorized under a **Watershed Management Permit** must be initiated within one year following the date of permit issuance. Failure to commence construction activities within one year following the date of permit issuance renders the issued **Watershed Management Permit** null and void.

2. Construction activities authorized under a **Watershed Management Permit** must be completed within three years following the date of permit issuance.

3. If construction activity has been started but is not completed within three years of the date of issuance of a **Watershed Management Permit** and the **co-permittee** intends to pursue the permitted activity, then the **co-permittee** shall submit a written request for an extension. Upon receipt of such request, either the **District** or an **authorized municipality** may grant an extension for construction activities under a **Watershed Management Permit**.

4. After issuance of a **Watershed Management Permit**, all material revisions to the plans require the approval of either the **District** or an **authorized municipality**. The **co-permittee** shall submit a written request for approval, the appropriate fee, and the revised plans to either the **District** or an **authorized municipality**. If either the **District** or **authorized municipality** determines that the revised plans are in compliance with the then current requirements of this **Ordinance**, an approval of the revised plans will be issued.

ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL

§ 400. Erosion and Sediment Control General Requirements

1. Any **development** requiring a **Watershed Management Permit** as specified in §201 of this **Ordinance** shall comply with the requirements of Article 4 of this **Ordinance**. All **co-permittees** shall submit the documents specified in §302 of this **Ordinance** to demonstrate compliance and must develop an **erosion** and **sediment** control plan.

2. All **developments** that are subject to National Pollutant Discharge Elimination System (**NPDES**) Permit ILR-10 shall meet the submittal and approval requirements of ILR-10.

3. All **developments** shall incorporate **erosion and sediment control practices** into the initial **site** plan. Primary emphasis should be placed on **erosion control practices** as they are preventative source controls, while **sediment control practices** are secondary measures designed to contain eroded soil after it is in transport.

4. For all **developments** that discharge directly to **Jurisdictional Waters of the U.S.**, the hydraulic and hydrologic design of the **erosion** and **sediment** control plan shall be designed for a **storm event** equal to or greater than a 25-year, 24-hour **storm event**.

5. Design criteria and specifications for **erosion and sediment control practices** shall be taken from the **Illinois Urban**

6. **Manual**, as amended.

7. Where criteria and specifications are not provided in the **Illinois Urban Manual**, the design criteria and specifications shall be taken from the **TGM**.

8. Other **erosion and sediment control practices** that are equally effective as those in the **Illinois Urban Manual** may be used if either the **District** or an **authorized municipality** provides prior written approval.

9. **Erosion and sediment control practices** shall be functional before disturbances are made to the **site**.

§ 401. Temporary Erosion Control Requirements

1. Existing vegetation shall be preserved where practicable to minimize the area of soil disturbance.

2. Selection of appropriate **erosion control practices** shall consider:

   A. Seasonal, topographic, and **maintenance** limitations;

B. The susceptibility of soils to **erosion**; and

C. Proximity to **flood protection areas**.

3. Temporary **erosion control practices** are **stabilization** measures that include, but are not limited to, protection of existing vegetation or establishment of new vegetation, such as seeding and sod **stabilization**, mulches and soil binders, geotextiles, **erosion** control blankets, plastic covers and mats, wind and dust control measures, **stormwater** conveyance channels, and velocity dissipation measures.

4. Areas where the existing ground cover does not consist of appropriate stabilizing vegetation in the portions of the **site** not under current **development** shall incorporate appropriate **erosion control practices**.

5. **Erosion control practices** shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent **stabilization** is achieved.

6. For projects involving phased construction, the portions of the **site** where construction activities have temporarily or permanently ceased must have **stabilization** practices completed within seven days, except:

   A. Where precluded by snow cover, **erosion control practices** shall be completed as soon as practicable; or

   B. Where construction activity resumes on that portion of the **site** within fourteen (14) days from when activities ceased.

7. If a soil stockpile is to remain dormant or undisturbed:

   A. For time periods between thirty (30) days and twelve (12) months, temporary **stabilization** shall be completed within seven days of the formation of the stockpile; or

   B. For time periods of more than twelve (12) months, permanent **stabilization** of the stockpile shall be completed within seven days of the formation of the stockpile.

8. Any trenches, holes, or other excavations required for utility installation shall be protected at the end of each workday.

9. **Development sites** shall incorporate appropriate **erosion control practices** that reduce the potential for wind **erosion**.

10. Velocity dissipation measures shall be placed at discharge locations and along the length of any outfall channel, as necessary, to provide a non-erosive velocity flow so that the natural, physical, and biological characteristics and functions of the channel are maintained and protected.

11. **Erosion control practices** shall be functional before disturbances are made to the **site**.

12. Earthen embankment side slopes shall not exceed 3:1 (horizontal to vertical) and shall be **stabilized** with an **erosion** control blanket.

§ 402. Temporary Sediment Control Requirements

1. Selection of appropriate **sediment control practices** shall consider:

   A. Seasonal, topographic, and **maintenance** limitations;

   B. Amount of tributary **drainage area**; and

   C. Proximity to **flood protection areas**.

2. **Sediment control practices** include, but are not limited to, **silt fences**, fiber rolls and berms, storm drain inlet controls such as barriers and inserts, entrance and exit controls, **sediment** traps, basins, and check **dams**. Straw bales shall not be used as **sediment control practices**.

3. Perimeter **sediment control practices** shall be installed and functioning prior to soil disturbance.

4. **Sediment control practices** shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent **stabilization** is achieved.

5. **Sediment control practices** shall intercept all **runoff** from **disturbed areas** before **runoff** leaves the **site** under the following conditions:

   A. **Disturbed areas** draining less than one acre shall be protected by **silt fence** or equivalent; or

   B. **Disturbed areas** draining more than one acre shall be protected by a **silt fence** and a **sediment basin** or equivalent, which shall be:

      (1) Sized to intercept the 2-year, 24-hour **runoff** volume from the tributary **drainage area**; and

(2) Located at the lowest point of the disturbance.

6. All storm drain inlets draining **disturbed areas** shall be protected with an appropriate **sediment control practice**.

7. A **stabilized** construction entrance/exit shall be provided to prevent soil from being tracked or deposited onto public or private roadways. Any soil reaching a public or private roadway shall be removed immediately and transported to a controlled **sediment** disposal area.

8. If a soil stockpile is created on the **site**, perimeter **sediment** controls shall be placed around the stockpile immediately.

9. Construction dewatering operations shall be designed and operated so that water discharged from a **site** will meet State of Illinois water quality standards, as set forth in Title 35, Subtitle C, Chapter I, Part 302, Subpart B, of the Illinois Administrative Code.

§ 403. Construction Site Management Requirements

1. All waste generated as a result of **site development** including, but not limited to, any building waste, concrete truck washout, chemicals, litter, sanitary waste, or any **other waste** shall be properly disposed of and shall be prevented from being transported offsite by either wind or water.

2. **Flood protection areas** shall be protected with a minimum of a double-row **silt fence** or equivalent measure.

3. Soil stockpiles or other construction materials shall not be located within **flood protection areas** or their buffers.

4. Temporary stream crossings used during construction shall be designed to convey a 2-year, 24-hour **flood** event without overtopping unless either the **District** or an **authorized municipality** approves a more frequent design event. In addition, the following conditions shall be met:

   A. Temporary stream crossings shall not reduce the carrying capacity of the channel;

   B. The entire crossing shall be designed to withstand hydrodynamic, hydrostatic, and erosive forces up to the **base flood** event without washing out;

   C. Upon completion of construction, the temporary stream crossings shall be entirely removed and the stream bed and banks restored to a stable non-erosive condition that incorporates native vegetation where appropriate; and

D. **Erosion and sediment control practices** shall be implemented and maintained during installation, **maintenance**, and removal of temporary stream crossings.

§ 404. Permanent Erosion Control Requirements

1. Permanent **erosion control practices** shall be initiated within seven days following the completion of soil disturbing activities.

2. All temporary **erosion and sediment control practices** shall be maintained until permanent **stabilization** practices are achieved by at least one of the following:

   A. The establishment of a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent on all unpaved areas and areas not covered by permanent **structures**; and

   B. Installation of riprap, gabions, or other non-vegetative practices.

3. All temporary **erosion and sediment control practices** shall be removed within thirty (30) days after permanent **stabilization** is achieved in accordance with §404.2 of this **Ordinance**.

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ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT

§ 500. General Site Development and Stormwater Management Information

1. All **developments** shall meet the requirements specified for general **site development** specified in §501, Article 4, Article 6, and Article 9 of this **Ordinance**.

2. All **co-permittees** shall submit the documents specified in Article 3 to verify compliance with the requirements in Article 5 of this **Ordinance**.

3. **Development** in **combined sewer areas** shall collect, route and discharge **stormwater** to the **waterway** as required in §502.19 of this **Ordinance**.

4. Analysis, design, and performance standards of all **stormwater facilities** required for **development** shall be consistent with the **TGM** for the **Ordinance**.

5. **Stormwater facilities** constructed under the provisions of this **Ordinance** shall be maintained according to the criteria and guidelines established in Article 9 of this **Ordinance**.

6. For all **developments**, **stormwater facilities** shall be designed to comply with Illinois drainage law in addition to the requirements of this **Ordinance**.

7. For any **development** subject to an intergovernmental agreement listed in Appendix G of this **Ordinance**, the terms of the intergovernmental agreement shall prevail over any conflicting requirements of Article 5 of this **Ordinance**.

§ 501. General Site Development and Stormwater Management Requirements

1. **Development** shall not:

   A. Increase **flood** elevations or decrease **flood** conveyance capacity upstream or downstream of the area under the **ownership** or control of the **co-permittee**;

   B. Pose any increase in **flood** velocity or impairment of the hydrologic and hydraulic functions of streams and **floodplains** unless a **water resource benefit** is realized;

   C. Unreasonably or unnecessarily degrade surface or ground water quality; and

   D. Violate any provision of this **Ordinance** either during or after construction.

2. **Development** shall meet the **site stormwater** management requirements of Article 5 as summarized in Table 2 of this **Ordinance**.

Table 2. Summary of Site Stormwater Management Requirements[1]			
	§502	§503	§504
Development Type (See Appendix A for definitions)	**Runoff Requirements**	**Volume Control Requirements[2]**	**Detention Requirements[2]**
Single-Family Home	Exempt	Exempt	Exempt
Residential Subdivision	**Parcels** ≥ 1 acre	**Parcels** ≥ 1 acre	**Parcels** ≥ 5 acres
Multi-Family Residential	**Parcels** ≥ 0.5 acre	**Parcels** ≥ 0.5 acre	**Parcels** ≥ 3 acres ‡
Non-Residential	**Parcels** ≥ 0.5 acre	**Parcels** ≥ 0.5 acre	**Parcels** ≥ 3 acres ‡
Right-of-Way	**New Impervious Area** ≥ 1 acre	**New Impervious Area** ≥ 1 acre †	**New Impervious Area** ≥ 1 acre †
Open Space	**Parcels** ≥ 0.5 acre	Not Applicable	Not Applicable

1 **Site stormwater** management requirements are not required for **maintenance activities** as defined in Appendix A.

2 Requirements are applicable when a **Watershed Management Permit** is required under §201 of this **Ordinance.**

† Where practicable.

‡ Starting the effective date of this **Ordinance,** any new **development** on the **parcel** that totals either individually or in the aggregate to more than one-half (0.5) of an acre.

The term "parcel" includes all contiguous ownership or interest, as defined in Appendix A

3. The **District** or an **authorized municipality** may issue a **Watershed Management Permit** without the **co-applicant** providing stormwater **detention facilities** for the entire **parcel** and place a special condition on the **Watershed Management Permit** requiring stormwater **detention facilities** to be provided by the **co-applicant** for future **development** on the **parcel**. The **co-applicant** shall submit Schedule L with the

Watershed Management Permit, which shall be recorded with the Cook County Recorder of Deeds, as an encumbrance against the entire **parcel**.

§ 502. Site Runoff Requirements

1. The requirements of this section shall apply to any of the following:

   A. **Residential subdivision development** on **parcels** totaling one acre or more;

   B. **Multi-family residential development** on **parcels** totaling one-half of an acre (0.5 acre) or more;

   C. **Non-residential development** on **parcels** totaling one-half of an acre (0.5 acre) or more;

   D. **Right-of-way development** totaling one acre or more of **new impervious area**, where practicable; and

   E. **Open space development** on **parcels** totaling one-half of an acre (0.5 acre) or more.

2. Transfers of waters between **watersheds** shall be prohibited except when such transfers will not violate any of the provisions of §501.1 of this **Ordinance**.

3. Concentrated discharges from **stormwater facilities** must enter conveyance systems that are:

   A. Capable of carrying the **design runoff rate** without increasing **flood** or **erosion** damages downstream or on adjacent property for the 2-year, 10-year, and 100-year **storm events**; or

   B. Contained within public **rights-of-way** or public easements.

4. **Design runoff rates** for **major stormwater systems** shall be calculated by using event hydrograph methods. Event hydrograph methods must be HEC-1 (SCS **runoff** method), HEC-HMS, or TR-20. A **critical duration analysis** is required for all methods. Event hydrograph methods shall incorporate the following assumptions:

   A. Antecedent Moisture Condition II;

   B. **Bulletin 70** northeast sectional rainfall statistics shall be used for rainfall depths; and

   C. Appropriate Huff rainfall distributions shall be used when performing the **critical duration analysis**.

5. **Minor stormwater systems** shall be sized to convey **runoff** from the **tributary area** under fully developed conditions consistent with the design requirements of the local jurisdiction or existing **stormwater** system.

6. **Major stormwater systems** shall be sized to convey the **design runoff rate** of the 100-year **storm event** using the methodology provided in §502.4 of this **Ordinance**. The **design runoff rate** for **major stormwater systems** shall include the calculated flows from all the **tributary areas** upstream of the point of design without increasing **flood** or **erosion** damages downstream or on adjacent properties.

7. Drain tiles that are found on the **site** during design or construction of the **development** shall be replaced and incorporated into the new **site** drainage plan or removed and incorporated into the new **site** drainage system, based upon their existing capacity and capability to properly convey low flow **groundwater** and upstream flows. The **co-permittee** shall ensure that:

    A. The new **site** drainage plan shall not cause damage to upstream and downstream **structures**, land uses, or existing **stormwater facilities**;

    B. Drain tiles that receive **upstream tributary flows** shall maintain drainage service during construction until the new **stormwater** system can be installed for a permanent connection;

    C. Replaced drain tile shall be properly reconnected to the downstream system and located within a public **right-of-way** or dedicated easement and marked on the **record drawings**; and

    D. Drain tiles are not tributary to either a **sanitary sewer** or **combined sewer**.

8. **Major stormwater systems** shall be located within easements or rights-of-way explicitly providing public access for **maintenance** of such facilities.

9. **Upstream tributary flows** must be considered for all **developments** and safely routed through or around the **site** in the following manner:

    A. Where **site** detention is not required in §504.1 of this **Ordinance**, the **co-permittee** shall demonstrate that the **development** will not increase velocities or flows downstream or on adjacent properties for the 2-year, 10-year, and 100-year **storm events**, at a minimum, using **critical duration analysis** and the methodology provided in §502.4 of this **Ordinance**; and

    B. Where **site** detention is required in §504.1, the requirements of §504.10 of this **Ordinance** apply.

10. The **runoff** or **flood** water storage function of **depressional storage** on the **site** shall be preserved. For **developments** where the **depressional storage** is altered, the **depressional storage** must be compensated in the following manner depending on whether **site** detention is required per §504.1 of this **Ordinance**:

    A. Where **site** detention is not required, the **co-permittee** shall demonstrate that the proposed **development** does not increase velocities, flows, or **flood** elevations downstream nor on adjacent properties for the 2-year, 10-year, and 100-year **storm events** of a 24-hour duration. The analysis shall utilize the methodology described in §502.4 of this **Ordinance** and include the **upstream tributary flow** areas to the existing **depressional storage**; and

    B. Where **site** detention is required, the requirements of §504.5 of this **Ordinance** shall apply.

11. All **developments** shall provide a separate **sanitary sewer** and a separate **storm sewer** within the property lines of the **development**.

12. Maximum flow depths on roads for all **development** shall not exceed twelve (12) inches during the **base flood** condition.

13. Maximum detention depths on new parking lots shall be designed for protection against damages caused by **stormwater** detention inundation, which shall not exceed twelve (12) inches. The inundation hazard below the 100-year high water elevation shall be clearly posted.

14. For **developments** adjacent to a **floodplain**, the **lowest floor** in new **buildings** or additions to existing **buildings** shall be:

    A. Elevated to the **FPE** as determined by §601.9 of this **Ordinance**; or

    B. **Floodproofed** or otherwise protected to prevent the entry of surface **stormwater** or floodwater below the **FPE** and such that the **lowest entry elevation** of the **building** is at or above the **FPE**; and

    C. **Floodproofing** devices should be operational without human intervention. If electricity is required for protection against **flood** damage, there shall be a backup power source that will activate without human intervention.

15. The **lowest floor** in new **buildings**, or added to existing **buildings**, adjacent to a **major stormwater system** as sized in §502.6 or a **detention facility** overflow path as designed in §504.11.C of this **Ordinance** shall be elevated, **floodproofed**, or otherwise protected to at least one foot above the design elevation associated with the design flow rate to prevent the entry of surface **stormwater**.

16. The **lowest floor** in new **buildings**, or added to existing **buildings**, adjacent to a **detention facility** as designed in §504.11 of this **Ordinance** shall be elevated, **floodproofed**, or otherwise protected with a minimum of one foot of freeboard for the **base flood** condition to prevent the entry of surface **stormwater**.

17. To the extent practicable, all **runoff** from rooftops and parking lots that does not discharge into a **detention facility** shall be directed onto pervious surfaces.

18. Proposed **developments** that discharge **stormwater** to a private sewer shall obtain written permission from the sewer **owner**.

19. The **co-permittee** shall procure any required federal, state, or local permits for **stormwater** discharges to a **waterway**. **Development** in **combined sewer areas** shall collect, route and discharge **stormwater** to either a **waterway** or **storm sewer** if:

    A. Any boundary of the **development** is within one-eighth (1/8) of a mile of either a **waterway** or **storm sewer**; or

    B. Any boundary of the **development** is within one-fourth (1/4) of a mile of either a **waterway** or **storm sewer** if practicable.

20. Proposed **developments** that propose offsite construction on private property shall obtain written permission from the property **owner** and obtain any required easements.

21. Watertight connections are required for any **storm sewer**, **sanitary sewer**, or **combined sewer**, excluding **underdrains**, tributary to a **combined sewer**. Watertight connections per **sanitary sewer** standards are required between sewer segments and all manholes, inlets, and **structures**.

22. **Underdrains** shall not be tributary to a **combined sewer**, unless:

    A. Separation is provided upstream of the receiving **combined sewer**;

    B. The **underdrain** is intended to protect a **building** or **structure** foundation and cannot discharge to a **storm sewer**; or

    C. The **underdrain** is used in conjunction with **green infrastructure** and conforms to §701.2.H of this **Ordinance**.

23. **Underdrains** shall not be directly connected to any sewer tributary to a **combined sewer** without backflow prevention.

§ 503. Site Volume Control Requirements

1. The requirements of this section shall apply to any of the following when a **Watershed Management Permit** is required under §201 of this **Ordinance**:

   A. **Residential subdivision development** on **parcels** totaling one acre or more;

   B. **Multi-family residential development** on **parcels** totaling one-half of an acre (0.5 acre) or more;

   C. **Non-residential development** on **parcels** totaling one-half of an acre (0.5 acre) or more; and

   D. **Right-of-way development** totaling one acre or more of **new impervious area**, where practicable.

2. The first inch of **runoff** from the **impervious area** of **development** on the **site** shall be the **volume control storage**. **Volume control storage** is required for all **development** with **impervious area** greater than or equal to 0.10 acre. **Development** with **impervious area** less than 0.10 acre shall provide **volume control storage** where practicable.

3. **Volume control practices** shall provide treatment of the **volume control storage**. The **volume control practices** shall be designed according to the following hierarchy:

   A. **Retention-based practices** with quantifiable storage capacity shall be the primary form of water quality treatment. **Retention-based practices** shall be provided onsite and shall:

      (1) Be sized to retain and infiltrate the **volume control storage**;

      (2) Include, but not be limited to: infiltration trenches, infiltration basins, porous pavement, bio retention systems, dry wells, open channel practices fitted with check **dams**, retention storage below the outlet of a **detention facility**, and constructed **wetlands** that have quantifiable storage; and

      (3) Provide pretreatment measures to protect the functionality of **retention-based practices** where necessary. **Flow-through practices** included in §503.3.C of this **Ordinance** may be used to meet the pretreatment requirement where appropriate.

      (4) Be located outside of the regulatory floodway.

B. If all means of providing **volume control storage** onsite are technically infeasible and documented, **offsite volume control practices** may be constructed if all of the following conditions are met:

(1) The **co-permittee** demonstrates that **site constraints** prevent the **development** from providing the full volume of the **volume control storage** onsite;

(2) The **parcel** area is less than ten (10) acres;

(3) **Runoff** from the **development site** utilizing **offsite volume control practices** must be routed through a **flow-through practice** located on the **parcel** for **sites** in which **runoff** is tributary to a **waterway**; and

(4) **Volume control storage** is traded and provided in a **retention-based practice**, partially or fully offsite, and located within the same subwatershed. The traded **offsite volume control practice** shall:

(a) Be approved under a **Watershed Management Permit** meeting all of the requirements of this Article 5 of this **Ordinance**;

(b) Provide sufficient volume for the associated traded **development**, above and beyond any volume required for the offsite **development** and any other traded **developments** utilizing the **volume control storage**;

(c) Capture equivalent impervious **stormwater runoff** from a **parcel** that is not tributary to an existing **volume control practice**;

(d) Be functional before utilization toward meeting the **volume control storage** requirements of any associated traded **development** with a **site constraint**;

(e) Provide a trade agreement for perpetual maintenance of the **offsite volume control practice** between all parties that have an **interest** in the **offsite volume control practice** and obligates the parties' successors and assigns to perpetually maintain the **offsite volume control practice**; and

(f) Record the recording submittal specified in §308.9 of this **Ordinance** with Cook County to ensure perpetual existence, function, trade agreement, and **maintenance**.

C. If all means of providing onsite and offsite **retention-based practices** are technically infeasible and documented, and a qualifying **site constraint** exists that prevents use of **retention-based practices** to retain the **volume control storage** in full, the following compliance alternative shall be applicable:

(1) The co-applicant may reduce the **volume control storage** by twenty-five percent (25%) for every five-percent (5%) of reduced **impervious area**;

(2) **Sites** tributary to **combined sewers** shall provide detained volume equivalent to the required **volume control storage**, per the following:

(a) **Sites** required to provide detention under §504 of this **Ordinance** of the WMO must provide detention volume equivalent to the **volume control storage** in addition to the detention volume required; and

(b) **Sites** in which detention is not required shall provide a **detention facility** for the required **volume control storage**.

(3) **Sites** tributary to a **waterway**, including those located in the **combined sewer area**, shall be required to provide **flow-through practices. Flow-through practices** shall:

(a) Be sized to filter the **volume control storage** as it passes through the **structure**; and

(b) Include, but not be limited to: vegetated filter strips, bio swales, constructed **wetlands**, catch basin inserts, and oil and grit separators.

4. Excess **volume control storage** may be installed for future anticipated impervious **development**. A concept plan must be provided to appropriate volume control toward anticipated **development**.

A. Future **development** will be subject to the volume control requirements in effect as of the date the future permit application is submitted.

B. If the excess **volume control storage** does not sufficiently meet the then existing requirements for the complete future **development**, then additional **volume control storage** will be required to make up the difference under the future **development** permit.

§ 504. Site Detention Requirements

1. The requirements of this section shall apply to any of the following when a **Watershed Management Permit** is required under §201 of this **Ordinance**:

   A. **Residential subdivision development** on **parcels** totaling five acres or more;

   B. **Multi-family residential development** on **parcels** totaling three acres or more with new **development** on the **parcel** that totals either individually or in the aggregate to more than one-half of an acre (0.5 acre) after the effective date of this **Ordinance**;

   C. **Non-residential development** on **parcels** totaling three acres or more with new **development** on the **parcel** that totals either individually or in the aggregate to more than one-half of an acre (0.5 acre) after the effective date of this **Ordinance**; and

   D. **Right-of-way development** totaling one acre or more of **new impervious area**, where practicable.

2. The area of **development** shall be used to calculate the **development**'s **allowable release rate**.

3. The **allowable release rate** for a **development** shall be determined at the time a complete **Watershed Management Permit** application is accepted by the **District** and shall be:

   A. 0.30 cfs/acre of **development** for the **storm event** having a one percent probability of being equaled or exceeded in a given year (100-year **storm event**) until June 5, 2019; and

   B. Based on a **watershed** specific release rate after and including June 6, 2019, as specified in Appendix B of this **Ordinance**. The **watershed** specific release rate shall not be less than 0.15 cfs/acre of **development**; and

   C. In compliance with §504.13 of this **Ordinance**.

4. The release rate from the **detention facility** in addition to any **unrestricted flow** shall not exceed the **allowable release rate** for the **development**.

5. For **sites** where **depressional storage** exists and where the existing **runoff** rate for the **development** is less than the **allowable release rate** provided in §504.3 of this **Ordinance**, then the **allowable release rate** and the corresponding **detention facility** volume shall be based on the existing **runoff** rate. The existing **runoff** rate shall be calculated using the methods described in §504.9 of this **Ordinance**.

6. When all **runoff** from a **development** is not captured in the **detention facility**, the **unrestricted flow** shall be addressed by:

   A. Demonstrating that the **unrestricted flow** does not cause offsite damage; and

   B. Mitigation of **unrestricted flow** by one of the following methods:

      (1) Diverting an equivalent **upstream tributary area** where detention is not provided to the **detention facility**;

      (2) Calculating the **unrestricted flow** rate using the methods in §504.9 of this **Ordinance** and reducing the required **site runoff** release rate such that the total developed release rate from the **development site** equals the **allowable release rate**; or

      (3) Planting the **unrestricted flow** area with native deep-rooted vegetation approved by either the **District** or an **authorized municipality**. **Unrestricted flow** areas shall be placed in an easement and maintained as a **native planting conservation area** in perpetuity. The **allowable release rate** for the **development** shall be based on the **development** area tributary to the **detention facility**.

7. **Detention facility** volume shall be calculated using either an event hydrograph routing method or the nomograph relating percent impervious to unit area as presented in the **TGM**. The nomograph shall not be used in any of the following scenarios:

   A. The **allowable release rate** is affected by **depressional storage** on the **site** described in §504.5 of this **Ordinance**;

   B. The **allowable release rate** is affected by **unrestricted flow** as described in §504.6.B(2) or §504.6.B(3) of this **Ordinance**;

   C. When there are **upstream tributary flows** to the **detention facility** described in §504.10 of this **Ordinance**; or

   D. When there are tailwater conditions on the **detention facility** outlet **structure**.

8. The **detention facility** volume calculated in §504.7 of this **Ordinance** can be reduced by:

   A. The volume of the retention-based **volume control storage** provided in §503.3.A of this **Ordinance** that is located on the same **site** as the **detention facility**; and

   B. The volume of any **retention-based practice** listed in §503.3.A.(2) of this **Ordinance** in excess of the **volume control storage** if all of the following conditions are met:

      (1) The storage volume of the **retention-based practice** is quantifiable;

      (2) The storage volume of the **retention-based practice** is accessed under the 100-year **storm event**;

      (3) The **development** complies with the **allowable release rate** specified in §504.3 of this **Ordinance**;

      (4) **Maintenance** responsibilities for the **retention-based practice** are delineated in the **maintenance** plan required in Article 9 of this **Ordinance**; and

      (5) The **volume control practice** and **detention facility** are located on the same **site**.

9. Event hydrograph methods shall be HEC-1, HEC-HMS, TR-20, or a method approved by the **District**, using SCS curve number methodology and an outlet control routing option. Event hydrograph methods shall incorporate the following assumptions:

   A. Antecedent Moisture Condition II; and

   B. 100-year **storm event** with a 24-hour duration, as specified in **Bulletin 70** northeast sectional rainfall statistics and appropriate Huff time distribution of heavy storm rainfall.

10. **Developments** that have **upstream tributary flow** to the **site** shall provide one of the following **site runoff** measures:

   A. Provide **detention facility** volume for the **development** at the **allowable release rate** while bypassing **upstream tributary flows** described in §502.9 of this **Ordinance** (bypass flow);

   B. Provide **detention facility** volume to accommodate both the **runoff** for the **development** and the **upstream tributary flow** area on the **site** at the **site**'s **allowable release rate**; or

C. Provide sufficient **detention facility** volume to accommodate **runoff** from the **development** and the **upstream tributary flow** area at a release rate that ensures that no adverse offsite impacts will occur. The **co-permittee** shall consider **runoff** from all **tributary areas** and demonstrate the impacts for 2-year, 10-year, and 100-year **storm events**, at a minimum, using **critical duration analysis** and the methodology provided in §504.9 of this **Ordinance**. The minimum **detention facility** volume required shall be based on the **site allowable release rate** as determined in §504.3 and §504.4 of this **Ordinance**.

11. **Detention facilities** shall be designed and constructed to:

A. Function with a gravity outlet wherever possible;

B. Function without human intervention and under tailwater conditions with minimal **maintenance**;

C. Provide an overflow **structure** and overflow path that can safely pass a **design runoff rate** of at least 1.0 cfs/acre of **tributary area** to the **detention facility**;

D. Provide side slope **stabilization**;

E. Provide earth **stabilization** and armoring with riprap, concrete or other durable material when high erosive forces could lead to soil **erosion** or washout. Examples of where armoring may be required include:

(1) **Storm sewer** flared end sections; and

(2) Emergency overflows.

F. Be accessible and maintainable; and

12. The outlet control device for **detention facilities** shall be:

A. Located within the property boundary when possible;

B. Durable and permanent;

C. Visible and accessible for **maintenance**;

D. Located on the outlet side of a manhole **structure**;

E. Designed to be self-cleaning; and

F. Designed to incorporate a backflow prevention device if discharging to a **combined sewer**.

13. **Detention facilities** in areas outside of the **regulatory floodway**, but within the **regulatory floodplain**, shall:

    A. Conform to all applicable requirements specified in Article 6 of this **Ordinance**; and

    B. Store the **site runoff** from the **development** such that the required post **development** release rate is not exceeded, assuming a zero release rate below the nearby effective **BFE**, by elevation, not delineation.

14. If it is not practicable to provide a **detention facility** onsite, an **offsite detention facility** may be constructed if all of the following conditions are met:

    A. The **site runoff** requirements in §502 and the **volume control storage** requirments in §503 of this **Ordinance** are satisfied;

    B. The **co-permittee** demonstrates that **site** limitations prevent the **development** from providing the full volume of the **detention facility** onsite;

    C. The **parcel** area is less than ten (10) acres;

    D. **Stormwater** detention is provided in accordance with the following hierarchy:

        (1) Partially onsite in a **detention facility** with supplemental storage offsite in an **offsite detention facility** according to §504.14.D(2) through §504.14.D(4) of this **Ordinance**;

        (2) Offsite in an **offsite detention facility** where the **development** conveys the 100-year **storm event** to the **offsite detention facility**;

        (3) Offsite in an **offsite detention facility** in a location that is upstream or hydrologically equivalent to the **development** in the same **subwatershed**; or

        (4) Offsite in an **offsite detention facility** within the same **subwatershed**;

    E. The **offsite detention facility** shall:

        (1) Meet all of the requirements of this Article 5 of this **Ordinance**;

        (2) Obtain a **Watershed Management Permit** separate from the **development**;

        (3) Provide 100% of the deficient onsite volume for the associated **development**;

        (4) Capture **stormwater runoff** from a **parcel** that is not tributary to an existing **stormwater detention facility**;

(5) Be functional before the **co-permittee** requests final inspection of the associated **development**; and

(6) Provide a trade agreement for perpetual maintenance of the **offsite detention facility** between all parties that have an interest in the **offsite detention facility** and obligates the parties' successors and assigns to perpetually maintain the **offsite detention facility**.

(7) Record the recording submittal specified in §308.9 of this **Ordinance** with the Cook County Recorder of Deeds to ensure perpetual existence, function, trade agreement, and **maintenance**.

F. A **co-permittee** may collaborate with either the Cook County Land Bank Authority or the South Suburban Land Bank and Development Authority referenced in §300.8 of this **Ordinance** to provide offsite **stormwater detention facilities**.

15. **Detention facilities** shall be functional before occupancy permits are issued for residential and **non-residential subdivisions** or **sanitary sewers** are placed in service.

16. **Detention facilities** shall be functional for **developments** before **building** construction or impervious paving begins.

17. A **development** is not required to comply with the **site** detention requirements of §504 of this **Ordinance** if the **development** satisfies all of the following conditions:

A. The **development** discharges **stormwater** to a **storm sewer** tributary to Lake Michigan;

B. The downstream receiving **storm sewer** has adequate capacity as determined by the governing **municipality**;

C. The **development** complies with the **site** volume control requirements of §503 of this **Ordinance**; and

D. The **development** intercepts and treats all **stormwater runoff** onsite to improve water quality prior to discharge from the **development**.

§ 505. Allowances for Redevelopment and Development Subject to Legacy Sewerage System Permits

1. For **redevelopment** of a **site** tributary to an **existing detention facility** that will only require a marginal increase in the new total storage required in the same **existing detention facility**, the increase in storage may be waived if the following conditions are met**:**

   A. Actual storage volume is verified to meet or exceed the required detention volume based on a recent survey, signed and sealed by either a **Professional Engineer** or **Professional Land Surveyor**; and

   B. The marginal increase in incremental required storage volume is less than one-tenth (0.10) of an acre-foot or within two percent (2%) of the existing total storage.

2. Incidental disturbance to an **existing detention facility** to provide the new required additional detention volume may be considered **non-qualified development**.

3. Allowances noted below may be granted for the **redevelopment** of a **parcel** that was planned to be tributary or contains within the **parcel** an **existing detention facility** permitted under a **sewerage system permit**:

   A. If the **redevelopment** meets <u>all</u> of the following conditions:

      (1) The design of the **existing detention facility** is documented and approved under an existing **sewerage system permit** (commonly referred to as Schedule D);

      (2) Actual storage volume is verified (or is further modified as part of the current work) to meet or exceed the required detention volume under the permit based on a recent survey, signed and sealed by either a **Professional Engineer** or **Professional Land Surveyor**;

      (3) The **redevelopment** provides treatment of the **volume control storage** as required in §503 of this **Ordinance**; and

      (4) The **redevelopment** provides adequate capacity to convey **stormwater runoff** to the **existing detention facility** for all storms up to and including the 100-year **storm event**;

   B. Then, the following **redevelopment** allowances may be granted:

(1) If the **redevelopment**'s composite **runoff** coefficient does not exceed the design composite **runoff** coefficient of the **existing detention facility** as designed and intended under the original permit, additional **stormwater** detention volume is not required;

(2) If the **redevelopment**'s composite **runoff** coefficient exceeds the design composite **runoff** coefficient of the **existing detention facility** as designed and intended under the original permit, additional **stormwater** detention volume shall be provided for the **redevelopment**. In such situations, the modified rational method using **Bulletin 70** rainfall data may be used to calculate the additional required storage volume. The release rate for the **redevelopment** will be based as follows:

(a) For **redevelopment** of areas within a permitted **parcel** intended to be tributary to an **existing detention facility,** the existing approved release rate and restrictor may be retained;

(b) For **redevelopment** of areas within a permitted **parcel** that was never intended to be tributary to an **existing detention facility**, but will become tributary to such **detention facility** upon **redevelopment**, the original release rate for the basin will be recalculated based on a pro-rated area amount. The total new required storage volume will be updated based on the new required release rate and the restrictor may need to be replaced.

C. For **redevelopment** of a **parcel** never planned to be tributary or that does not contain an **existing detention facility** permitted under a **sewerage system permit**, the **redevelopment** shall be subject to the standard **stormwater** management requirements described in §500 through §504 of this **Ordinance**.

4. Allowances noted below may be granted for the **redevelopment** of a **parcel** that contains a **detention facility** within the **parcel** that was never permitted under a **sewerage system permit**:

A. If the **redevelopment** meets <u>all</u> of the following conditions:

(1) Actual detention volume is verified (or is further modified as part of the current work) to meet or exceed the detention volume calculated according to the standards set under the Legacy Sewer Permit Ordinance, and signed and sealed by either a **Professional Engineer** or **Professional Land Surveyor**;

(2) Actual release rate from the existing control structure is verified (or is further modified as part of the current work) to be less than the requirements set under the **Sewer Permit Ordinance**, and the calculations are signed and sealed by a **Professional Engineer**;

(3) The **redevelopment** provides treatment of the **volume control storage** as required in §503 of this **Ordinance**; and

(4) The **redevelopment** provides adequate capacity to convey **stormwater runoff** to the **detention facility** for all storms up to and including the 100-year **storm event**.

B. Then, the following **redevelopment** allowances may be granted:

(1) If the **redevelopment**'s proposed **impervious area** does not exceed the existing or anticipated **impervious area**, additional **stormwater** detention volume is not required;

(2) If the **redevelopment**'s proposed **impervious area** exceeds the existing or anticipated **impervious area**, additional **stormwater** detention volume shall be provided for the **redevelopment**. In such situations, the modified rational method using **Bulletin 70** rainfall data may be used to calculate the additional required storage volume. The release rate for the **redevelopment** will be based on a pro-rata share of **redevelopment**'s portion of the actual release rate of the control structure.

ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS

§ 600. Flood Protection Areas

1. **Flood Protection Areas** include **floodplains**, **wetlands**, **wetland buffers**, and **riparian environments**. Requirements for determining **floodplains** are specified in §601 of this **Ordinance**. Requirements for delineating **wetlands** are specified in §603 of this **Ordinance**. Requirements for determining **riparian environments** are specified in §606 of this **Ordinance**.

2. Any **development** within the **floodplain** shall comply with the requirements of §601 and §602 and the requirements of Article 4, Article 5, and Article 9 of this **Ordinance**.

3. Any **development** within **wetlands** shall comply with the requirements of §603, §604, and §605 and the requirements of Article 4, Article 5, and Article 9 of this **Ordinance**.

4. Any **development** within **riparian environments** shall comply with the requirements of §606 and §607 and the requirements of Article 4, Article 5, and Article 9 of this **Ordinance**.

5. All **co-permittees** shall submit the documents specified in Article 3 of this **Ordinance** to verify compliance with the requirements of this **Ordinance**.

6. Compliance with Article 6 of this **Ordinance** does not excuse the **co-permittee** from meeting all applicable federal, state, and local requirements including, but not limited to, the local **NFIP** regulations.

7. Any human-induced change in improved or unimproved real estate within the **regulatory floodplain** not considered to be **development** under this **Ordinance** shall meet the requirements of the local jurisdiction's **NFIP** ordinance. Compliance with §601 and §602 of this **Ordinance** does not excuse the **co-permittee** from meeting all local requirements for participation in the **NFIP**.

§ 601. Requirements for Floodplain, Regulatory Floodway, and Flood Protection Elevation Determination

1. **Development** within **floodplains** shall not:

   A. Result in any new or additional expense to any **person** other than the **co-permittee** for **flood** protection or for lost environmental stream uses and functions;

B. Increase **flood** elevations or decrease **flood** conveyance capacity upstream or downstream of the area not under the **ownership** or control of the **co-permittee;**

C. Pose any increase in **flood** velocity or impairment of the hydrologic and hydraulic functions of streams and **floodplains** unless a **water resource benefit** is realized;

D. Unreasonably or unnecessarily degrade surface or ground water quality; or

E. Violate any provision of this **Ordinance** either during or after construction.

2. Any **co-permittee** proposing **development** shall identify the elevation and boundary of the **regulatory floodplain** and the limits of the **regulatory floodway** within the **development site**.

3. The **regulatory floodplain** shall be determined by the **base flood** elevation (**BFE**) as determined by the effective Cook County Flood Insurance Study (**FIS**) and associated **FIRM**s, including any Letter of Map Change (**LOMC**) that has been issued by the Federal Emergency Management Agency (**FEMA**). The **co-permittee** is responsible for utilization of the current applicable **FIRM** and any associated **LOMC**. A list of **FIRM**s for **Cook County** is provided in the **TGM**. **FIRM**s are available at **FEMA**'s Map Service Center; a web link to **FEMA**'s Map Service Center is provided in the **TGM**.

4. Determination of the **BFE** in **Special Flood Hazard Areas** shown on the **FIRM** associated with the effective **FIS** shall be determined for:

A. AE Zones by using the 100-year profile at the **development site**;

B. AH Zones by using the elevation noted on the applicable **FIRM**;

C. AO Zones by using the **highest adjacent grade** plus the depth number shown on the applicable **FIRM**, or two feet above the **highest adjacent grade** if no depth number is provided;

D. For areas shown as A Zones on the effective **FIS**, a **BFE** shall be determined by a project-specific **floodplain** study approved by either the **District** or an **authorized municipality**. This study shall be approved by **OWR** in cases where both:

(1) The **drainage area** is one (1) square mile or greater; and

(2) The **development** is associated with a permit that will be issued by **OWR**.

5. When a known **flood** hazard is not identified as a **Special Flood Hazard Area** on the **FIRM**, the **District** or an **authorized municipality** may require the **co-permittee** to perform a project-specific **floodplain** study to determine the project-specific **100-year flood elevation**. This study shall be approved by **OWR** in cases where both:

   A. The **drainage area** is one square mile or greater; and

   B. The **development** is associated with a permit that will be issued by **OWR**.

6. Project-specific **floodplain** studies shall be performed by a **Professional Engineer** using the appropriate models when applicable:

   A. TR-20, HEC-1, or HEC-HMS hydrologic model;

   B. HEC-2 or HEC-RAS hydraulic model; or

   C. A model or technique approved by the **District** and **OWR**.

7. The **co-applicant** shall observe the **regulatory floodway** as designated by **OWR**, which is delineated on the effective **FIRM**. If a **floodway** is not designated on the **FIRM** then the following shall apply:

   A. When the **drainage area** is greater than one square mile, then the **regulatory floodway** shall be deemed to be the limits of the **regulatory floodplain** and subject to all **floodway** requirements of this **Ordinance** with the exception of the **appropriate use** criteria in §602.27 of this **Ordinance**; or

   B. When the **drainage area** is less than one (1) square mile, then a **floodway** designation is not required.

8. The **regulatory floodway** may be re-designated by the **co-permittee**. For **floodways** where the **drainage area** is greater than one square mile, approval of the re-designation shall be required by **FEMA**, through a Conditional Letter of Map Revision (**CLOMR**) and/or Letter of Map Revision (**LOMR**). **OWR** concurrence is also required by **FEMA** where a **regulatory floodway** is re-designated.

9. The **co-permittee** shall determine the flood protection elevation (**FPE**). The **FPE** shall be two feet above the highest **100-year flood elevation** as determined by:

   A. The **BFE** associated with the effective **Cook County FIS**, including any **LOMC** that has been issued by **FEMA**; or

   B. Project-specific **100-year flood elevation** developed in §601.5 of this **Ordinance**.

§ 602. Requirements for Development within the Floodplain and Residential Buildings within 100-feet of the Floodplain

1. For purposes of this §602, the **floodplain** shall be the area of the **regulatory floodplain** (§601.3 and §601.4) and any inundation areas resulting from the **100-year flood elevation** determined in §601.5 of this **Ordinance**. The **100-year flood elevation** in this §602 of this **Ordinance** is the highest of the **BFE** or the project-specific **100-year flood elevation**.

2. For new **buildings**, additions to existing **buildings**, and **substantial improvements** to **single-family homes**,- the **lowest floor** shall be elevated to at least the **FPE** in accordance with the requirements specified in §602.10, §602.11, and §602.12, unless protected in accordance with §602.3 of this **Ordinance**.

3. New **buildings**, additions to existing **buildings**, or **substantial improvements** to **single-family homes** with the **lowest floor** below the **BFE** shall comply with the following:

   A. The lowest opening in the foundation wall, shall be at or above the **FPE**;

   B. Provide **compensatory storage** per §602.7 and §602.8 of this **Ordinance**;

   C. Demonstrate that a **building**, **building site**, and foundation below the **BFE** are reasonably safe from **flooding** per design standards requirements in Technical Bulletin 10-01 issued by **FEMA**; and

   D. Obtain a Letter of Map Revision Based on Fill (**LOMR-F**) if the **building site** is in the **regulatory floodplain**.

4. **Substantial improvements** to **buildings** in the **floodplain** may be **floodproofed**. **Floodproofing** shall meet the requirements listed in §602.10 or §602.12 of this **Ordinance** and shall be operational without human intervention.

5. New **accessory structures** in the **floodplain** shall be regulated by the relevant **municipality** under its **NFIP** ordinance.

6. New parking lots built below the **100-year flood elevation** shall clearly post the potential **flood** hazard.

7. **Compensatory storage** shall be required for any fill, **structure**, or other material above grade in the **regulatory floodplain** that temporarily or permanently displaces **floodplain** storage volume. In addition, **compensatory storage** shall:

   A. Equal at least 1.1 times the volume of **flood** storage lost below the **BFE**;

B. Be operational prior to placement of fill, **structures**, or other materials temporarily or permanently placed in the **regulatory floodplain**;

C. Be provided in the immediate vicinity of the **flood** storage lost, where practicable;

D. Be provided in addition to the **site** detention volume; and

E. Drain freely and openly to the **waterway**.

8. **Compensatory storage** shall be provided incrementally as follows:

A. All **regulatory floodplain** storage lost below the existing regulatory 10-year **flood** elevation shall be replaced below the proposed regulatory 10-year **flood** elevation;

B. All **regulatory floodplain** storage lost above the existing regulatory 10-year **flood** elevation shall be replaced above the proposed regulatory 10-year **flood** elevation; and

C. The additional **compensatory storage** required beyond a one to one (1:1) ratio may be placed above or below the proposed regulatory 10-year **flood** elevation.

9. **Compensatory storage** is not required for the **floodproofing** of existing **buildings** for the **floodplain** volume displaced by the **building**.

10. New **structures** that are elevated, existing **structures** that are **floodproofed**, **or substantial improvements** shall:

A. Be anchored to prevent flotation, collapse, or lateral movement;

B. Use **flood** resistant materials below the **FPE**;

C. Use construction methods and practices that do not increase the potential for increases in **flood** damage;

D. Elevate electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities to the **FPE** or higher;

E. Provide adequate access and drainage; and

F. Provide a backup power source that will activate without human intervention if electricity is required.

11. Any fill required to elevate a **building** must:

A. Extend ten feet beyond the foundation before the grade slopes below the **100-year flood elevation** for **buildings**, unless it is demonstrated that the **building** and **building site** are reasonably safe from **flooding** per design standard requirements in Technical Bulletin 10-01 issued by **FEMA**;

B. Be placed in layers no greater than six inches deep before compaction; and

C. Provide compensatory storage per §602.7 and §602.8 of this **Ordinance**.

12. When a **structure** is elevated by means other than filling:

A. The **lowest floor** of any **building** and all electrical, heating, ventilating, plumbing, and air conditioning equipment of any **structure** shall be located at or above the **FPE**.

B. Elevation can be accomplished using stilts, piles, walls, or other foundations. Walls and foundations below the **lowest floor** that are subject to **flooding** shall be designed so that hydrostatic forces on exterior walls are automatically equalized by allowing for the entry and exit of floodwaters and shall be anchored and aligned in relation to **flood** flows and adjoining **structures** so as to minimize exposure to known hydrodynamic forces such as currents, waves, ice, and floating debris. Designs for meeting this requirement shall be prepared, signed, and sealed by a structural engineer or licensed architect in the State of Illinois and meet or exceed the following minimum criteria:

(1) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to **flooding**;

(2) The bottom of all openings shall be no higher than one (1) foot above grade;

(3) Openings may be equipped with screens, louvers, valves, or other coverings, provided that such coverings do not impede the automatic entry and exit of floodwaters;

(4) The grade interior to the foundation of the **structure** shall not be more than two feet below the lowest adjacent exterior grade;

(5) An adequate drainage system must be installed to remove floodwaters from the area interior to the **structure** foundation within a reasonable period of time after the floodwaters recede; and

(6) All materials and **structures** below the **FPE** shall be resistant to **flood** damage.

C. **Compensatory storage** for elevation of **structures** allowed in §602.12 of this **Ordinance** shall not be required.

13. All **CLOMR**, **LOMR**, and **LOMR-F** applications require the approval of the governing **municipality** and shall be submitted to either the **District** or an **authorized municipality** concurrently with the application to **FEMA**.

14. No filling, grading, dredging, excavating, or other proposed **development** within the **regulatory floodplain** that results in an increase to the **FIS** effective **BFE** or a modification to the **regulatory floodway** boundary shall take place until a **CLOMR** is issued by **FEMA** and a **floodway** construction permit is issued by **OWR**.

15. If a **LOMR** is required by **FEMA**, no **building** construction shall take place until the approved **LOMR** is issued by **FEMA**.

16. **Stormwater facilities** within the **regulatory floodplain**, such as culverts, bridges, and impoundments that have an associated backwater shall not be removed, replaced, or modified unless all of the following apply:

    A. All **structures** and their associated **lowest entry elevations** within the backwater of the existing **stormwater facility** are identified;

    B. **Hydraulically equivalent compensatory storage** is provided to mitigate any potential increases in flow or **flood** elevations upstream or downstream of the **stormwater facility**; and

    C. A **water resource benefit** is provided.

17. All proposed sanitary **structures** shall have above ground openings located above the **FPE** or be constructed with bolted watertight **structure** lids.

18. Lift station facilities (including mechanical and electrical equipment)

    A. Existing lift station facilities to be repaired or rehabilitated shall have all above ground equipment elevated above the **FPE**. Where possible, ground openings and vents shall be adjusted above the **FPE** or be constructed with lock-type, watertight **structure** lids to protect against the **base flood**.

    B. New lift station facilities shall be located above the **FPE** and outside the limits of the **regulatory floodplain.** New lift stations facilities shall also be carefully located to ensure **maintenance** access at all times during the **base flood**.

19. New and replacement water supply systems and wells shall either have all above ground openings above the **FPE** or be watertight.

20. New waste disposal systems on the **site** shall not be constructed within the **floodplain**.

21. Construction of **District** required **volume control practices** and **detention facilities** within the **regulatory floodway** is strictly prohibited.

22. **Detention facilities** located outside of the **regulatory floodway** but within the **floodplain** shall:

    A. Store the required **site runoff** under all stream flow and backwater conditions up to the **100-year flood elevation**, assuming a zero release rate below the **100-year flood elevation**; and

    B. Not allow design release rates to be exceeded under any stream elevation less than the **100-year flood elevation**.

23. New or modified **storm sewer outfalls** shall meet the requirements of §501 and §502 of this **Ordinance** and shall comply with **Illinois Department of Transportation**'s **(IDOT)** minimum standards. Relevant **IEPA** and **NPDES** permits shall be required for all new **outfalls** to **waterways** and Lake Michigan. Copies of all such permit applications for **outfalls** located within the City of Chicago should be provided concurrently to the **District.**

24. Temporary or permanent storage of items susceptible to **flood** damage is prohibited unless elevated or **floodproofed** to the **FPE.**

25. **Development** shall preserve effective **regulatory floodway conveyance** such that there will be no increases in **flood** elevations, flow rates, or **regulatory floodway** velocity, unless these increases are contained in a **public flood easement**, a **water resource benefit** is provided, and a **CLOMR** is issued by **FEMA** prior to any work in the **regulatory floodway.**

26. For any proposed **development** within the **regulatory floodway** the **co-permittee** shall provide either the **District** or an **authorized municipality** with an evaluation of the hydrologic and hydraulic impacts of the **development**:

    A. Using the **regulatory floodplain** model, if available, or a study as directed by the **District** using the methodology provided in §601.6 of this **Ordinance**;

    B. For the 2-year, 10-year, and 100-year **storm events** for the 24-hour event, at a minimum; and

    C. For existing and any future planned **watershed** conditions as directed by either the **District** or an **authorized municipality**.

27. Within the **regulatory floodway**, any proposed **development** shall meet the requirements of §602 of this **Ordinance** and only the following **appropriate uses** shall be considered for permits:

A. **Flood** control **structures**, dikes, **dams**, and other public works or private improvements relating to the control of drainage, **flooding**, or **erosion** or water quality or habitat for fish and wildlife that provides a **water resource benefit**;

B. **Structures** or facilities relating to the use of, or requiring access to, the water or shoreline, such as pumping and treatment facilities, and facilities and improvements related to recreational boating, commercial shipping, and other functionally dependent uses;

C. **Storm** and **sanitary sewer outfalls**;

D. Underground and overhead utilities;

E. Recreational facilities such as playing fields and trail systems including any related fencing built parallel to the direction of **flood** flows;

F. Detached garages, storage sheds, or other non-habitable **accessory structures** to existing **buildings** that will not block **flood** flows. This does not include the construction or placement of any other new **structures**, fill, **building** additions, **buildings** on stilts, fencing (including landscaping or plantings designed to act as a fence), and the storage of materials;

G. Bridges, culverts, roadways, sidewalks, railways, runways and taxiways, and any modification thereto**;**

H. Parking lots built at or below existing grade where either:

(1) The depth of **flooding** at the **BFE** will not exceed one (1) foot; or

(2) The parking lot is for short-term outdoor recreational use facilities where the **co-permittee** agrees to restrict access during overbank **flooding** events and agrees to accept liability for all damage caused by vehicular access during all overbank **flooding** events. Signs shall be posted to clearly identify the **flooding** hazard.

I. Aircraft parking aprons built at or below ground elevation where the depth of **flooding** at the **BFE** will not exceed one (1) foot;

J. **Regulatory floodway** re-grading without fill to create a positive slope toward the watercourse;

K. **Floodproofing** activities to protect existing **structures** including, but not limited to, constructing water tight window wells and elevating;

L. The replacement, reconstruction, or repair of a damaged **building**, provided that the outside dimensions of the **building** are not increased, and provided that, if the **building** is damaged to fifty (50) percent or more of the **building**'s market value before it was damaged, the **building** will be protected from **flooding** to or above the **FPE**; and

M. Modifications to an existing **building** that would not increase the enclosed floor area of the **building** below the **BFE**, and would not block **flood** flows to including, but not limited to, fireplaces, bay windows, decks, patios, and second story additions.

N. Specific construction approved by IDNR-**OWR**.

28. Transition sections are required for the calculation of effective **regulatory floodway conveyance** due to the modification or replacement of existing bridge and culvert **structures** or to compensate for lost conveyance for other **appropriate uses**. The following expansion and contraction ratios shall be assumed to determine transition sections:

A. Water will expand at a rate no faster than one foot horizontal for every four feet of flooded stream length;

B. Water will contract at a rate no faster than one foot horizontal for every one foot of flooded stream length; and

C. Water will not expand or contract faster than a rate of one foot vertical for every ten feet of flooded stream length.

§ 603. Requirements for Wetland Boundary, Quality, and Buffer Width Determination

1. **Wetlands** provide any or all of the following functions:

A. Facilitate hydrologic functions, including infiltration, evaporation, and evapotranspiration;

B. Reduce **flood** flow rates, velocities, and volumes;

C. Provide **flood** control by storing **stormwater**;

D. Prevent **erosion** and promote bank stability of streams, **lakes**, and ponds;

E. Control **sediment** from **upland** areas reducing the impact of urbanization on stream habitat and water quality by filtering and assimilating nutrients discharged from surrounding **uplands**;

F. Serve as important areas for de-nitrification, which reduces growth of algal blooms and subsequent depressed levels of dissolved oxygen in-stream; and

G. Provide an effective mechanism for treatment of contaminated surface **runoff**.

2. Any **co-permittee** proposing **development** shall investigate the **site** for the presence of **wetlands**. The **co-permittee** shall use the following sources and methods to determine if **wetland** areas may exist on the **site**:

A. Onsite **wetland** investigation;

B. National Wetland Inventory (**NWI**) Maps from the United States Fish and Wildlife Service (USFWS);

C. National Resource Conservation Service (**NRCS**) wetland inventory maps; and

D. **Wetlands** identified in current and historical aerial photographs, United States Geological Survey (USGS) hydrological atlas, soil survey of **Cook County**, and USGS topographic maps.

3. The **co-permittee** shall identify the boundaries, extent, function, and quality of all **wetland** areas on the **site**. The presence and extent of **wetland** areas on the **site** shall be determined as the result of an onsite **wetland** delineation according to the following:

A. All onsite **wetland** delineations are required to use procedures in accordance with the current **Corps Wetland Delineation Manual**; or

B. **Farmed wetlands** located on the **site** in agricultural areas which are in production and which are not determined to be **wetlands** through the federal **wetland** methodology shall be delineated through the current National Food Security Act Manual methodology;

C. Agricultural areas that have been abandoned for five (5) consecutive years shall be delineated in accordance with the **Corps Wetland Delineation Manual**.

4. The **co-permittee** shall request a **Corps jurisdictional determination** of any identified **wetland** areas on the proposed **site**.

5. The approximate location, extent, and quality of offsite **wetlands** within 100 feet of the **site** shall be identified. Offsite **wetlands** shall be delineated using the **Corps Wetland Delineation Manual,** or if delineation is unavailable or cannot be performed, the approximate limits of **wetlands** shall be identified using one or more of the following resources:

   A. **NWI** Maps from the United States Fish and Wildlife Service (USFWS);

   B. **NRCS** wetland inventory maps; and

   C. **Wetlands** identified in current and historical aerial photographs, USGS hydrological atlas, soil survey of **Cook County**, and USGS topographic maps.

6. Any offsite **wetland** that cannot be accessed in the field by a **wetland specialist** shall be considered a **high quality isolated wetland** and shall be subject to the **wetland buffers** of §603.10.C of this **Ordinance**.

7. The following **isolated wetland** areas are exempt from the **wetland** requirements of this **Ordinance**:

   A. **Wetlands** in roadside ditches created by excavation in **upland** areas;

   B. **Wetlands** created by excavation or by other unfinished **development** activities in **upland** areas;

   C. **Wetlands** created by artificial **hydrology** including, but not limited to, irrigation or **detention facility** outlets which would revert to **upland** areas if irrigation was to cease;

   D. **Wetlands** created by the construction of **stormwater facilities** in **upland** areas, provided that the facility was not created for the purpose of **wetland mitigation**; and

   E. **Wetlands** created by the construction of ponds in **upland** areas.

8. Either the **District** or an **authorized municipality** shall verify all onsite **isolated wetland** determinations and delineations.

9. The **co-permittee** shall provide an assessment of any identified **isolated wetland** and classify it as either a **high quality isolated wetland** or a **standard isolated wetland** using the criteria described below. Either the **District** or an **authorized municipality** will make the final determination of **wetland** status. A **high quality isolated wetland** satisfies any one of the criteria listed below. An **isolated wetland** that does not meet any of the following criteria can be classified as a **standard isolated wetland**. The criteria to receive a **high quality isolated wetland** status are as follows:

   A. It has a **Swink and Wilhelm Floristic Quality Index (FQI)** value greater than or equal to 20 during a single season assessment or a native mean C-value of 3.5 or higher as calculated by the Swink and Wilhelm methodology; or

   B. It is known to possess a federal- or state-listed threatened or endangered species based upon consultation with the Illinois Department of Natural Resources (IDNR) and the United States Fish and Wildlife Service (USFWS).

10. **Wetland buffers** for **isolated wetlands** shall be determined according to the classification of the **wetland** as determined in §603.9 of this **Ordinance**. Minimum **isolated wetland buffer** widths shall be as follows and as summarized in Table 3 of this Article 6 of this **Ordinance**:

   A. Thirty feet from the boundary of **standard isolated wetlands** greater than or equal to one-tenth of an acre (0.10 acre) and less than one-half of an acre (0.5 acre) in area;

   B. Fifty feet from the boundary of **standard isolated wetlands** greater than or equal to one-half of an acre (0.5 acre) in area; or

   C. One-hundred feet from the boundary of **high quality isolated wetlands**.

Table 3. Wetland Buffer Determination for Isolated Wetlands

Wetland Quality	Acreage	§603.10.A	§603.10.B	§603.10.C
Standard Isolated Wetland	≥ 0.10 acre and < 0.50 acre	30 ft		
	≥ 0.50 acre		50 ft	
High Quality Isolated Wetland	No minimum			100 ft

11. The **Wetland Buffer** width for **isolated wetlands** may be varied to a minimum of the greater of one-half the required buffer width or thirty (30) feet, upon approval of either the **District** or an **authorized municipality**.

§ 604. Requirements for Development Affecting the Function of Wetlands and Wetland Buffers

1. Requirements for **development** affecting the function of **wetlands** are summarized in Table 4 of this Article 6 of this **Ordinance**.

Table 4. Wetland Impact Matrix					
Wetland Type	**Wetland Area**	**§604.2**	**§604.3**	**§604.4**	**§604.5**
Corps Jurisdictional Wetland	**Any**	X			
Standard Isolated Wetland	**<0.10 acre**				X
	≥0.10 acre			X	
High Quality Isolated Wetland	**Any**		X		

2. **Development** that impacts onsite **Corps jurisdictional wetlands** shall be prohibited unless a permit for all regulated activities is obtained from the appropriate federal and state authorities.

3. **Development** that impacts onsite **high quality isolated wetlands** shall be prohibited unless documentation is submitted that demonstrates:

   A. That the presence of **high quality isolated wetlands** precludes all economic use of the **site** and that no practicable alternative to **wetland** modification exists; or

   B. That avoidance of **high quality isolated wetlands** would create a hazardous road condition and that no practicable alternative to **isolated wetland** modification exists.

   Based upon a review of the submitted documentation and any other available resources, either the **District** or an **authorized municipality** will make the final determination as to whether the proposed **high quality isolated wetland** modification represents the least amount of **wetland impact** required to allow economic use of the **parcel** or to mitigate the road hazard; and a determination as to whether a permit should be granted.

4. **Development** that impacts onsite **standard isolated wetlands** that are equal to or greater than one-tenth of an acre (0.10 acre) in aggregate shall be prohibited unless documentation is submitted which demonstrates that no practicable alternative to **wetland** modification exists. Based upon a review of the submitted documentation and other available resources, either the **District** or an **authorized municipality** will make a determination as to whether the proposed **wetland** modifications will be permitted.

5. **Development** that impacts onsite **standard isolated wetlands** with a total acreage less than one-tenth of an acre (0.10 acre) in aggregate, including **contiguous Isolated Waters** less than one-tenth of an acre (0.10 acre), does not require documentation showing that no practicable alternatives to **wetland** modification exist.

6. **Development** will be permitted only when the indirect environmental impacts to onsite and offsite **wetlands** can be sufficiently evaluated, minimized, and mitigated as specified in §604 and §605 of this **Ordinance**. The designed **hydrology** should be maintained as close to 100 percent of the existing **hydrology** as possible. An **indirect wetland impact** shall be assumed if the **development** activity causes the **wetland hydrology** to fall below 80 percent, or to exceed 150 percent, of the existing condition **storm event runoff** volume to the **wetland** for the 2-year, 24-hour **storm event**.

7. **Detention facilities** are permissible in **standard isolated wetlands**. **Detention facilities** are not permissible in **high quality isolated wetlands**. **Detention facilities** are not permissible in **Corps jurisdictional wetlands** when prohibited by the **Corps**. When detention is provided in a **standard isolated wetland**:

    A. The **wetland hydrology** should be maintained as close to 100 percent of the existing **hydrology** as possible;

    B. The **wetland hydrology** shall not fall below 80 percent, nor exceed 150 percent, of the existing condition **storm event runoff** volume to the **wetland** up through the 2-year, **24-hour storm event**; and

    C. The **isolated wetlands** shall not be inundated with more than twelve inches of water above the **isolated wetland's** normal water elevation for longer than twenty four hours during **storm events** up to and including the 100-year, 24-hour **storm event**.

8. **Stormwater** outlets discharging into an **isolated wetland** will only be allowed provided that appropriate **volume control practices** and **erosion control practices** are proposed and the outlets discharge through proper energy dissipation and scour protection, such as a level spreader or vegetated swale.

9. Mitigation for **developments** that impact an **isolated wetland** shall provide for the replacement of the lost **wetland** environment in accordance with Table 5 of this Article 6 of this **Ordinance**:

Table 5. Isolated Wetland Mitigation Requirement Ratios					
Wetland Quality	**Area**	**§604.9.A**	**§604.9.B**	**§604.9.C**	**§604.9.D**
Standard Isolated Wetland	<0.10 acre	None			
	≥0.10 acre		1.5:1		
High Quality Isolated Wetland	Any			3:1	
Impacts Prior to Issuance of Permit					3:1

A. Impacts to **standard isolated wetlands** less than one-tenth of an acre (0.10 acre) in aggregate do not require mitigation;

B. Impacts to **standard isolated wetlands** more than or equal to one-tenth of an acre (0.10 acre) in aggregate shall be mitigated at a minimum ratio of one-and-one-half acre of creation for each acre impacted (1.5:1);

C. **High quality isolated wetlands** impacts shall be mitigated at a minimum ratio of three acres of creation for each acre impacted (3:1);

D. **Isolated wetland** impacts initiated after the effective date of this **Ordinance** and prior to issuance of a **Watershed Management Permit**, or other unauthorized impact shall be mitigated at a minimum ratio of three acres of creation for each acre impacted (3:1); and

E. The **District**, federal, state, and local authorities may require a greater compensation ratio where unique **wetland** functions are threatened.

10. When **development** impacts an **isolated wetland**, mitigation of said impacts shall be accomplished through one or more of the following options:

A. Payment into a **Corps** approved **wetland mitigation bank** within the same **Watershed Planning Area** as the impact;

B. Payment into a **Corps** approved **wetland mitigation bank** that is closest to the **development** within the same **Corps** Watershed Service Area as the impact as shown in Appendix D of this **Ordinance**;

C. Enhancement of an existing onsite **isolated wetland** from a **standard isolated wetland** to a **high quality isolated wetland**, subject to §604 of this **Ordinance**;

D. Expansion of an existing onsite **isolated wetland**;

E. Onsite **wetland mitigation**; and

F. Offsite **wetland mitigation** within the same **Watershed Planning Area** as the impact.

11. **Wetland mitigation** for impacts to **Corps jurisdictional wetlands** shall not be credited toward **wetland mitigation** for impacts to **isolated wetlands**.

12. Mitigated **isolated wetlands** shall be designed to duplicate or improve the hydrologic and biologic features of the original **isolated wetland**.

13. Creation of **wetlands** for the mitigation of **development** impacts, within or affecting a **wetland**, may take place only within areas that are not currently **wetlands** and where there is reasonable expectation that **wetland mitigation** will succeed.

14. Either the **District** or an **authorized municipality** may allow an existing **isolated wetland** that is **contiguous** to a proposed **isolated wetland mitigation site** to be enhanced in quality from a **standard isolated wetland** to a **high quality isolated wetland** in exchange for a partial reduction in the mitigation area required. In no case shall there be a loss of **wetland** function. Either the **District** or an **authorized municipality** may reduce the total **wetland mitigation** area required by 0.75 acre for every one acre of such **wetland** enhancement; however, the area of creation of new **wetlands** to compensate for unavoidable **wetland** loss shall not be allowed to fall below a ratio of one acre of creation for each acre impacted (1:1).

15. An **isolated wetland mitigation** plan shall be developed by the **co-permittee**. This plan shall include design, construction, monitoring, and **maintenance** of the mitigation measures and shall meet the requirements of Article 9 of this **Ordinance**. Cumulative impacts with a total acreage less than one-tenth of an acre (0.10 acre) to all onsite **standard isolated wetlands** do not require a **mitigation** plan.

16. **Development** in or affecting an **isolated wetland** shall be initiated only after the mitigation plan has been approved by either the **District** or an **authorized municipality**.

17. The design, analysis, and construction of all **wetland mitigation** shall comply with all applicable federal, state, and local regulations**.**

18. Either the **District** or an **authorized municipality** will require that the **co-permittee** provide annual monitoring reports on the status of the constructed mitigation measures for five years, or until such time that the performance criteria have been met. Either the **District** or an **authorized municipality** may also require the **co-permittee** to undertake remedial action to bring the area into compliance with the mitigation plan.

19. **Development** within an **isolated wetland buffer** shall not, without mitigation:

    A. Adversely change the quantity, quality, or temporal and areal distribution of flows entering any adjacent **wetlands** or waters;

    B. Adversely affect any **groundwater** infiltration functions; or

    C. Destroy or damage vegetation that stabilizes **wetland** fringe areas or provides overland flow filtration to **wetlands**. The removal of invasive vegetation is not considered to be destruction or damage of vegetation.

20. Impacts to **buffer** areas shall be mitigated through the replacement or enhancement of impacted functions.

§ 605. Wetland Banking

1. **Isolated wetland mitigation** provided through a **wetland mitigation bank** shall abide by the following hierarchy unless the method is not available, or unless the next method is justified through avoidance and minimization sequencing:

    A. Payment into a **Corps** approved **wetland mitigation bank** in the same **watershed planning area**; or

    B. Payment into a **Corps** approved **wetland mitigation bank** that is closest to the **development** within the same **Corps** Watershed Service Area as the impact as shown in Appendix D of this **Ordinance**.

2. The payment amount made into a **wetland mitigation bank** will be determined by multiplying the acres of required mitigation by the appropriate banking cost.

3. **Wetland mitigation bank** credits applied toward impacts to **Corps jurisdictional wetlands** may not be applied simultaneously to mitigate impacts to **isolated wetlands**.

4. **Wetland mitigation banks** shall be approved by the **Corps**.

§ 606. Riparian Environments Requirements

1. **Riparian environments** provide any or all of the following functions:

   A. Reduce **flood** flow rates, velocities, and volumes;

   B. Prevent **erosion** and promote bank stability of streams, **lakes**, ponds, or **wetland** shorelines;

   C. Control **sediment** from **upland** areas, reducing the impact of urbanization on stream habitat and water quality by filtering and assimilating nutrients discharged from surrounding **uplands**;

   D. Insulate and moderate daily and seasonal stream temperature fluctuations by maintaining cooler in-stream temperatures for areas with overhanging vegetation;

   E. Serve as important areas for de-nitrification which reduces growth of algal blooms and subsequent depressed levels of dissolved oxygen in-stream; and

   F. Provide an effective mechanism for treatment of contaminated surface **runoff**.

2. Any **developments** involving **riparian environments** shall identify the boundaries of those **riparian environments** by using the following documents or procedures at the time of the **development** and which are summarized in Table 6 of this Article 6 of this **Ordinance**:

Table 6. Riparian Environment Determination

Biological Stream Characterization	**Waters Classification**	**§606.2.A**	**§606.2.B**	**§606.2.C or §606.2.D**
All Other Streams	Jurisdictional Water of the U.S.	*50 feet from the **OHWM***		
	Isolated Waters		*30 feet from the **OHWM***	
BSC of "A" or "B" or **BSS** Streams	Jurisdictional Water of the U.S.			*100 feet from the **OHWM***
	Isolated Waters			*100 feet from the **OHWM***

   A. For any **Jurisdictional Waters of the U.S.** that does not qualify as a **wetland**, the **riparian environment** shall be 50 feet from the **OHWM**.

B. For any **Isolated Waters** that does not qualify as a **wetland**, the **riparian environment** shall be 30 feet from the **OHWM**.

C. For any **Jurisdictional Waters of the U.S.** or for any **Isolated Waters** that do not qualify as a **wetland**, and which have a **BSC** of "A" or "B", the **riparian environment** shall be 100 feet from the **OHWM**.

D. For any **Jurisdictional Waters of the U.S.** or **Isolated Waters** that do not qualify as a **wetland** identified as a **BSS**, the **riparian environment** shall be 100 feet from the **OHWM**.

3. The following are not considered to be **riparian environments** and shall be exempt from the **riparian environment** requirements of this **Ordinance**:

A. Roadside ditches created by excavation for the purposes of **stormwater** conveyance;

B. Channels or bodies of water created by unfinished **development** activities; or

C. Channels or bodies of water created by the construction of **stormwater facilities** for the purposes of **stormwater** management.

§ 607. Requirements for Development That Affect the Function of Riparian Environments

1. **Development** that impacts **Jurisdictional Waters of the U.S.** or **jurisdictional wetlands** on the **development site** shall be prohibited unless a permit for the regulated activities is obtained from the appropriate federal and state authorities.

2. To the extent practicable, the existing functions of a **riparian environment** as defined by §606.1 of this **Ordinance** shall be protected.

3. Adverse impacts to **riparian environment** functions shall be defined as:

A. Modification or relocation of streams and channels;

B. Significant changes to quantity, quality, or distribution of flows draining to any adjacent **wetlands** or waters; or

C. Damage to vegetation that overhangs, stabilizes, and provides overland flow filtration, or shades stream channels, **wetlands**, or impoundments that normally contain water. The removal of invasive vegetation is not considered to be destruction or damage of vegetation. The removal of vegetation and downed trees impeding drainage is not considered to be damage to vegetation when included as part of a **District** recognized program or project for stream **maintenance**, or **stabilization**, restoration, or enhancement.

4. Adverse impacts to the existing functions of a **riparian environment** shall be mitigated and a mitigation plan shall be prepared.

5. The following requirements pertain to channel relocation and **stabilization** practices:

   A. When practicable, impacts to natural streams and channels should be avoided;

   B. If a channel is completely or partially relocated, the newly created portion shall be constructed in a manner which will allow naturalizing to occur including, but not limited to, meandering, pools, or riffles;

   C. New or relocated channels shall be built under dry conditions through the diversion of the normal flow within the channel. All items of construction (including establishment of vegetation) shall be completed prior to diversion of water into the new channel;

   D. If a channel is modified, an approved and effective **erosion and sediment control practice** to minimize and control suspended **sediment** and degradation of downstream water quality must be installed before excavation begins. The installed means must be maintained throughout the construction period and conform to the requirements of Article 4 of this **Ordinance**;

   E. The length of any new or relocated channel shall be greater than or equal to the length of the disturbed channel;

   F. Any channel modifications shall meet all other requirements in the **Ordinance**, including the **floodplain** and **floodway** requirements described in §601 and §602 of this **Ordinance**;

   G. The **co-permittee** shall provide a plan and profile of the existing and proposed channel and supporting calculations for the channel width, depth, sinuosity, and riffle locations. Impacts on **flood** flows and **flood** elevations shall be evaluated using appropriate hydrologic and hydraulic methods;

H. Streams and channels shall be expected to withstand all events up to the **base flood** without increased **erosion**. Hard armoring of banks with concrete, bulkheads, riprap, and other man-made materials shall be avoided where practicable. Hard armoring shall be used only where **erosion** cannot be prevented by use of bioengineering techniques or gradual slopes. Such armoring shall not have any adverse impact on other properties, nor shall it have an adverse impact upon the existing land use; and

I. All **disturbed areas** must be replanted for stability with native vegetation where appropriate. The **TGM** provides examples of native vegetation that is appropriate in **riparian environments**.

6. Re-vegetation of **disturbed areas** within **riparian environments** shall take place as soon as possible. In accordance with §404.1 of this **Ordinance**, **stabilization** practices shall be initiated as soon as practicable in portions of the **site** where construction activities have temporarily or permanently ceased.

7. **Stormwater** outlets discharging into a channel will only be allowed provided that appropriate **volume control practices** are implemented and that they discharge through proper energy dissipation, such as a level spreader or vegetated swale.

8. A riparian mitigation plan in accordance with §306 and §308.8 of this **Ordinance** shall be developed. Mitigation of **riparian environment** impacts shall include design, construction, and continued monitoring and **maintenance** of the mitigation measures and shall meet the requirements of Article 9 of this **Ordinance**.

9. The design, analysis, and construction of all **riparian environment** mitigation measures shall comply with all applicable federal, state, and local regulations.

10. **Development** in or affecting a **riparian environment** shall be initiated only after a mitigation plan has been approved by either the **District** or an **authorized municipality**.

11. Either the **District** or an **authorized municipality** will require that the **co-permittee** provide annual reports monitoring the status of the constructed mitigation measures for five years, or until such time that the performance criteria has been met. Either the **District** or an **authorized municipality** may also require the **co-permittee** undertake remedial action to bring the area into compliance with the mitigation plan.

§ 608. Requirements for Outfalls

1. All new and reconstructed **outfalls** to any **waterways** within **Cook County**, including Lake Michigan, require a **Watershed Management Permit**. For new and reconstructed **outfalls** to **waterways** located in the City of Chicago, a **facility connection authorization** is required.

2. All new and reconstructed **outfalls** must provide an appropriate energy dissipation **structure**. **Outfalls** constructed within **riparian environments** will be subject to the requirements of §607 of this **Ordinance**.

3. All new and reconstructed **outfalls** to Lake Michigan must provide a water quality device to pre-treat all discharge into the lake.

4. Neither **erosion** nor downstream **flooding** shall result from discharge from a new or reconstructed **outfall**. In accordance with Article 4 of this **Ordinance**, **stabilization** practices shall be initiated as soon as practicable in portions of the **site** where construction activities have temporarily or permanently ceased.

5. All new and reconstructed **outfalls** within **Cook County** for which a **Watershed Management Permit** is required shall comply with the details, technical requirements, and design guidelines contained in the **TGM**.

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ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

§ 700. General Sewer Construction Requirements

1. The intent of Article 7 of this **Ordinance** is to supersede requirements of the repealed **Sewer Permit Ordinance** and the **Manual of Procedures,** as described in §104 of this **Ordinance**, as these prior ordinances related to the regulation, permitting and enforcement of **qualified sewer construction.**

2. A **Watershed Management Permit** is required for **qualified sewer construction** as defined in §701 of this **Ordinance**.

3. A **Watershed Management Permit** is not required for **non-qualified sewer construction,** as defined in §701.2 and §701.3 of this **Ordinance**.

4. All **qualified sewer construction** shall meet the requirements specified under Article 7 of this **Ordinance**.

5. Any **qualified sewer construction** planned in conjunction with general **site development** shall also meet the requirements specified under Article 4, Article 5, and Article 6 of this **Ordinance** where applicable. Qualified sewer that conveys **stormwater** shall not:

   A. Result in any new or additional expense to any **person** other than the **co-permittee** as a result of **stormwater** discharge;

   B. Increase **flood** elevations or cause an adverse impact to **stormwater** conveyance capacity upstream or downstream of the area under the **ownership** or control of the **co-permittee**;

   C. Pose any increase in **flood** velocity or impairment of the hydrologic and hydraulic functions of streams and **floodplains** unless a **water resource benefit** is realized;

   D. Unreasonably or unnecessarily degrade surface or ground water quality; and

   E. Violate any provision of this **Ordinance** either during or after construction.

6. All **permittees** and **co-permittees** shall submit the documents specified in §307 to verify compliance with the requirements in Article 7 of this **Ordinance**.

7. Design and performance standards of all **qualified sewer construction** shall be consistent with the **TGM**.

8. **Qualified sewer construction** installed under the provisions of this **Ordinance** shall be maintained according to the criteria and guidelines established in Article 9 of this **Ordinance**.

9. **Qualified sewer construction** shall be designed to comply with all Federal, State, and local laws and engineering standards pertaining to sewer construction, including but not limited to:

   A. The **District**'s **Sewage and Waste Control Ordinance**;

   B. Title 35 of the Illinois Administrative Code;

   C. **Illinois Pollution Control Board** Technical Releases and other applicable rules and regulations issued;

   D. **Illinois Recommended Standards for Sewage Works**;

   E. **Standard Specifications for Water & Sewer Construction in Illinois**; and

   F. **Recommended Standards for Wastewater Facilities**.

10. The **District** may enter into service agreements to provide an outlet for **sanitary sewer** service, for the following service area types:

   A. **Cook County municipalities** that are **contiguous** to the corporate limits of the **District**; or

   B. **Multi county municipalities**, provided that the **municipality** is located partly within the corporate limits of the **District**.

   When the area to be served by the service agreement is not within the corporate limits of the **District**, the terms and conditions of Article 7 of this **Ordinance** apply to the area to be served.

11. **Connection impact fee** for annexing areas into the **District.**

   A. Any **permittee** and **co-permittee** that have not previously paid a **connection impact fee** for any permit project area that annexed to the **District** on or after July 9, 1998, shall pay a **connection impact fee** to the **District** at a time that such area or a portion thereof is the subject of a **Watershed Management Permit.**

   B. **Connection impact fees** are not required for:

(1) Publicly owned facilities performing a local governmental function that discharge only domestic **sewage** into the **District's** collection facility; or

(2) Real estate tax-exempt facilities that discharge only domestic **sewage** into the **District's** collection facility.

C. **Connection impact fees** are contained in Appendix F of this **Ordinance**.

§ 701. Qualified Sewer Construction

1. **Qualified sewer construction** is considered all public and private new sewers and new sewer connections, exterior to a **building envelope**, including sewer repair and sewer replacement. **Qualified sewer construction** includes any of the following:

A. New and replacement sewers including:

(1) **Sanitary sewer** (public and private);

(2) Sanitary **service sewer** (exterior to **building envelope**);

(3) **Combined sewer**;

(4) **Storm sewer** within **combined sewer areas**;

(5) **Storm sewer** tributary to a **combined sewer** and/or a **District** collection or **water reclamation facility**;

(6) **Structures** and appurtenances to sewers listed above;

(7) Force main conveying any flows from sewer listed above;

(8) Repair of an existing lift station or sewer listed above;

(9) Reinstatement of an existing unpermitted sewer as listed above;

(10) Cured-In-Place-Pipe-Lining (CIPP) of existing public sewers; and

(11) Alterations to the conveyance capacity of a sewer system, as listed above.

B. New and replacement sewer connections, including:

(1) **Building** connections at the **building envelope**;

(2) Public sewer connections in the **right-of-way**;

(3) Direct connections to **District** interceptors or interceptor **structures**, (except for within the City of Chicago);

(4) Direct connections to **District TARP structures** or tunnels (except for within the City of Chicago);

(5) Direct connections to **District**-owned reservoirs, properties or facilities (pump stations, **water reclamation facilities**, etc., except for within the City of Chicago); and

(6) Outfalls to **waterways** or Lake Michigan (except for within the City of Chicago).

C. For direct connections and outfalls noted above, §701.1.B.(3-6), within the City of Chicago, refer to **Facility Connection Authorization** in §703 of this **Ordinance**.

2. **Non-qualified sewer construction** includes any of the following:

A. Private **single-family home** storm drain or **service sewer** (less than three (3) units);

B. Plumbing internal to any **building envelope**;

C. **Storm sewer** tributary to a **waterway** in **separate sewer areas**;

D. Septic system sewers;

E. Sewers and sewer connections constructed outside of **District** corporate limits or service agreement areas, at the time of permit application;

F. Private grey water, reclamation, or water harvesting sewers and associated connections located in **separate sewer areas** and not tributary to **District water reclamation facilities**;

G. **Structure** footing drains; and

H. Within **combined sewer areas**, perforated **underdrains** solely associated with **green infrastructure** improvements or **volume control practices** that meet the following conditions:

(1) Tributary to a **waterway**; or

(2) Conform with §502.22 of this **Ordinance** and the **groundwater** separation design guidelines contained in the **TGM**.

3. **Sewer maintenance** is considered **non-qualified sewer construction** and includes any of the following:

   A. Cured-In-Place-Pipe-Lining (CIPP) of existing previously permitted private sewers;

   B. Grouting of existing sewers; and

   C. Jetting, cleaning, and root-treating of existing sewers.

§ 702. Qualified Sewer Construction Requirements

1. **Qualified sewer construction** shall not:

   A. Pollute public potable water supply systems (water mains);

   B. Pollute **waterways**, water bodies or **groundwater**;

   C. Discharge sanitary **sewage** without treatment:

      (1) Into a **storm sewer** system in a **separate sewer area**;

      (2) Onto the ground; or

      (3) Into a receiving **waterway**;

   D. Convey **industrial wastes** that qualify for pre-treatment;

   E. Drain clean clear **groundwater** into a collection system tributary to a **water reclamation facility**;

   F. Increase **basement** backups, **sanitary sewer** overflows, or **combined sewer** overflows by disproportionally decreasing **sewage** capacity within the existing **sanitary sewer** system and/or **combined sewer** system;

   G. Allow excessive infiltration and inflow into a collection system tributary to **water reclamation facilities**;

   H. Allow **stormwater** to enter **sanitary sewer** systems in **separate sewer areas**;

   I. Combine **storm sewer** flow with **sanitary sewage** within a **parcel** (including within **Combined Sewer Areas**). Complete separation of sewers shall be provided within a **parcel**, and **sewage** may only be combined at the property line, immediately prior to the public **combined sewer** main connection; and

J. Violate any provision of this **Ordinance** either during or after construction.

2. **Qualified sewer construction** requirements by project type:

A. **Single-Family Home**

(1) Private single-family residential **service sewer** (less than three (3) units) is exempt from these **Ordinance** requirements, provided that:

(a) An extension of public **qualified sewer construction** is not required to obtain service access; and

(b) Wastes consist of domestic **sewage** only.

(2) Single family residential **service sewer** shall not run:

(a) Parallel to the **right-of-way**; or

(b) Extend beyond the ends of the **right-of-way** frontage.

B. **Residential Subdivision**

(1) Any extension of public **qualified sewer construction** within a **residential subdivision development** requires a **Watershed Management Permit**.

(2) An application submittal for a **Watershed Management Permit** shall include a plan and profile of all public sewers.

(3) Each residential single-family **service sewer** meeting conditions specified under §702.2.A(1) of this **Ordinance** can be considered exempt from these requirements.

(4) Refer to Table 2 in Article 5 of this **Ordinance** to determine **site stormwater** management requirements.

C. **Multi-Family Residential Sewer**

(1) Residential **service sewer** for a **building** with three (3) units or more requires a **Watershed Management Permit**.

(2) A **multi-family residential service sewer** may require an inspection manhole prior to the public **right-of-way**. The appropriate **District** inspection manhole detail is available from the **TGM** and shall be provided on the plans, when appropriate**.**

(3) Refer to Table 2 in Article 5 of this **Ordinance** to determine **site stormwater** management requirements.

D. **Non-Residential Service Sewer**

(1) **Non-residential service sewer** requires a **Watershed Management Permit**.

(2) All **non-residential service sewers** require inspection manholes prior to the public **right-of-way**. The appropriate **District** inspection manhole detail is available from the **TGM** and shall be provided on the plans.

(3) Refer to Table 2 in Article 5 of this **Ordinance** to determine **site stormwater** management requirements.

(4) Refer to the **TGM** for further design guidelines.

(5) Objectionable Wastes. When the use of a **non-residential building** is such that it will produce objectionable wastes or heavily-loaded discharges, (e.g. auto service, garage, car wash), the **co-permittee** shall comply with all of the following requirements:

(a) Provide a triple basin, or similar settling **structure**, to treat all non-domestic flow, prior to discharging into the sewer main;

(b) Perform regularly scheduled **maintenance** to remove and properly dispose of all collected objectionable wastes; and

(c) Provide a detail of the triple basin (or settling **structure**) on the plans.

(6) Fats, Oils and Grease. When the use of a **non-residential building** is such that Fats, Oils, and Grease are expected to be produced and discharged (e.g. restaurants), the **co-permittee** shall comply with all of the following requirements:

(a) Provide a grease separator, or similar device, to treat all non-domestic flow, except the discharge from an automatic dishwasher, prior to discharging to the sewer main;

(b) Perform regularly scheduled **maintenance** to remove and properly dispose of all collected fats, oils, and grease; and

(c) Provide a detail of the grease separator on the plans.

(7) **Industrial Waste** Potential. When the use of a **non-residential building** does not involve processes or operations that will produce **industrial wastes** (e.g. warehouse), the **co-permittee** shall:

(a) Provide a statement on the **owner**'s letterhead describing the use of the **building**; and

(b) Certify that no **industrial waste** will be allowed to discharge into the sewer system.

(8) **Industrial Waste** Present. When the use of a **non-residential building** involves processes or operations that will produce **industrial wastes** (e.g. chemical plating, industrial food processing, etc.), the **co-permittee** shall submit:

(a) A statement on the **owner**'s letterhead describing the use of the **building** and the processes used;

(b) The additional appropriate permit forms, disclosing the planned effluent characteristics of wastes;

(c) The additional appropriate permit forms for documenting the onsite treatment / pre-treatment facilities planned;

E. **Public Lift Station / Force Main**

(1) Gravity sewers shall be used whenever practicable. Lift stations and force mains may only be used after all other alternatives have been exhausted.

(2) Lift station pumping capacity shall be designed and justified on the basis of dry weather flow expected from the population to be served at the time of permit **development**, or derived from actual flow monitoring data.

(a) Additional pumping capacity accommodations may be made for reasonable future build-out of undeveloped / underdeveloped areas within the tributary sewer shed. In such situations, a future service area exhibit and flow estimate must be provided to justify final lift station capacity.

(b) Lift stations shall be designed to operate with standby pumping capacity available for system redundancy in the event of a pump failure. Pumps will be designed to alternate operation to evenly distribute wear and to ensure the standby pump is regularly exercised. Double pumping (dual discharge of design flow rated pumps) in excess of the calculated peak capacity is prohibited.

(c) Unjustified excessive lift station capacity (including existing facilities under rehabilitation) is prohibited.

(3) Discharge of force mains directly into another lift station is discouraged and is only allowed when it is impracticable to discharge into a gravity sewer. Where a force main or a lift system is designed to discharge into another lift station, a detailed report is required to justify such design and shall include:

(a) A written statement that other methods were considered and exhausted;

(b) A written recommendation of the design supported by engineering considerations;

(c) Written approval of the **owner** of the receiving lift station acknowledging the risks and the need for additional **maintenance**; and

(d) A **maintenance** and operation agreement between the **co-permittee** and **owner** specifying the responsibilities of each in case of failure of either lift station.

(4) Completion of the appropriate additional permit schedule for documentation of lift station design and capacity.

(5) Refer to the **TGM** for further design guidelines.

F. **District Interceptor, TARP and other Direct Connections to District Facilities**

(1) Excluding the City of Chicago, direct connections to **District** facilities require a **Watershed Management Permit.** For direct connections within the City of Chicago refer to **Facility Connection Authorization** in §703 of this **Ordinance.**

(2) Refer to §701.1.B of this **Ordinance** for a list of **District** facilities requiring a permit for direct connection.

(3) Preliminary coordination with the **District** is recommended prior to submitting a permit application for proposed connections to **District** f**acilities. The co-permittee shall** formally petition the **Director of Engineering**, or his/her designee, in writing to schedule a coordination meeting.

(4) Written approval from the **District** shall be obtained prior to entering any **District** facilities (including **TARP** and interceptor manholes).

(5) The appropriate **District** direct connection details, specification for connection, and proper construction requirements are available from the **TGM** and shall be provided on the plans. Refer to the **TGM** for further design guidelines.

(6) Complete the appropriate additional permit schedule for documentation of direct connections to **District** facilities.

G. **Outfall Connections**

(1) Excluding the City of Chicago, all new and reconstructed **outfalls** to **waterways** and Lake Michigan within **Cook County** require a **Watershed Management Permit**. For outfalls within the City of Chicago refer to **Facility Connection Authorization** in §703 of this **Ordinance**.

(2) New and reconstructed **outfalls** shall comply with the requirements of §608 of this **Ordinance**.

(3) All new and reconstructed **outfalls** within **Cook County** shall comply with the details, technical requirements, and design guidelines contained in the **TGM**.

(4) Complete the appropriate additional permit schedule to document the **outfall** connections location.

H. **Treatment and Pretreatment Facilities**

(1) Treatment and pretreatment facilities include, but are not limited to, treatment processes, private treatment plants, oxidation ponds, and similar facilities.

(2) Preliminary coordination with the **District** is recommended prior to submitting a permit application for proposed treatment facilities. The co-applicant shall formally petition the **Director of Engineering**, or his/her designee, in writing to schedule a coordination meeting.

(3) Refer to the **TGM** for further design guidelines.

I. **Septic Systems**

(1) The **District** does not regulate the design, construction, or **maintenance** of septic systems for **sewage** disposal serving a **single-family home** or **building**. When proposing septic systems, the **co-permittee** shall obtain permits from all relevant local and state authorities.

(2) Septic systems shall not discharge effluent to a sewer tributary to the **District**'s interceptors or **water reclamation facilities**.

(3) When septic systems are disconnected and a sanitary service connection is made, existing septic systems shall be removed or abandoned by completely filling the tank with granular material. Connections and piping to the new **sanitary sewer** system shall be watertight and made upstream of the septic tank. All existing septic systems and tank connections to be abandoned shall be plugged with non-shrink mortar or cement.

(4) **Non-residential** projects on septic systems or private treatment plant systems that propose connection to a **sanitary sewer** system shall provide **stormwater** detention for all proposed **development.** Refer to Table 2 in Article 5 of this **Ordinance** to determine **site stormwater** management requirements.

(5) Refer to the **TGM** for further design guidelines.

J. **Sewer Construction in Floodplain**

(1) All proposed sanitary **structures** shall have above ground openings located above the **FPE** or shall be constructed with watertight bolt down **structure** covers/lids.

(2) Refer to Article 6 of this **Ordinance** for further requirements regarding **development** within **flood protection areas**.

(3) Refer to the **TGM** for further design guidelines.

(4) Lift station facilities (including mechanical and electrical equipment) **flood** protection requirements are distinguished based on the following type of work:

(a) Existing lift station facilities to be repaired or rehabilitated shall have all above ground equipment elevated above the **FPE**. Where possible, ground openings shall be adjusted above the **FPE** or be constructed with watertight bolt down **structure** covers/lids to protect against the **base flood**.

(b) New lift station facilities shall be located above the **FPE** and outside the limits of the **regulatory floodplain.** New lift stations facilities shall also be carefully located to ensure **maintenance** access at all times during the **base flood**.

§ 703. Facility Connection Authorization

1. Within the City of Chicago, a **facility connection authorization** application is necessary to track the following types of connections to **District** owned, operated, and maintained facilities, and for impact to **District** owned or leased property:

A. **District Interceptor, TARP and other Direct Connections to District Owned Sewer Collection Facilities**

(1) Preliminary coordination with the **District** is recommended prior to submitting a **facility connection authorization** application for proposed connections to **District** facilities. The co-applicant shall formally petition the **Director of Engineering**, or his/her designee, in writing to schedule a coordination meeting.

(2) Written approval from the **District** shall be obtained prior to entering any **District** facilities including **TARP** and interceptor manholes.

(3) The appropriate **District** direct connection details, specification for connection, and proper construction requirements are available from the **TGM** and shall be provided on the plans. Refer to the **TGM** for further design guidelines.

B. **District Property Impact**

(1) All impacts, including new planned improvements, on **District** owned or leased property within **City of Chicago** must first obtain a **facility connection authorization**.

(2) Preliminary coordination with the **District** is recommended prior to submitting a **facility connection authorization** application for proposed improvements to **District** property or facilities. The co-applicant shall formally petition the **Director of Engineering**, or his/her designee, in writing to schedule a coordination meeting.

(3) Written approval from the **District** shall be obtained prior to entering any **District** facilities including **TARP** and interceptor manholes.

C. **Outfall** connections to the Chicago Area Waterway System and Lake Michigan

(1) All new and reconstructed **outfalls** connections either direct or indirect to the Chicago Area Waterway System or Lake Michigan within the City of Chicago must first obtain a **facility connection authorization**.

(2) New and reconstructed **outfalls** structures shall comply with the requirements of §608 of this **Ordinance**.

(3) All new and reconstructed outfalls shall comply with the details, technical requirements, and design guidelines contained in the **TGM**.

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ARTICLE 8. INFILTRATION / INFLOW CONTROL PROGRAM

§ 800. Introduction

The separate **sanitary sewers** within the District's service area are designed and intended to receive and convey only domestic and industrial wastewaters together with a limited amount of **groundwater** infiltration. **Stormwater** runoff and excessive **groundwater** infiltration, however, have in many cases been entering and overloading **sanitary sewers** through deficiencies in the sewer systems such as open pipe joints, cracked or broken pipes, leaking manholes, and illegal connections (i.e., direct or indirect **stormwater**/**groundwater** connections to separate sanitary sewers). Sewer overloading arising from such deficiencies may cause health hazards, financial losses, and inconvenience to area residents. These detrimental conditions occur as a consequence of water pollution from treatment plant bypasses and sewage overflows into streams, and also as a result of backups of sewage into buildings and onto streets and yards. Excessive extraneous clear water flows also result in additional sewage treatment costs to the public. Since the enactment of the 1985 Sewer Summit Agreement (**SSA**), many communities have invested in rehabilitation efforts yet the sewer systems still have excessive **stormwater** inflow and **groundwater** infiltration (I/I) requiring further reduction. Many communities still need to establish on-going **maintenance** programs and budgets that continually renew local systems. The Illinois Environmental Protection Agency (**IEPA**) has imposed a special condition as part of the District's National Pollutant Discharge Elimination System (**NPDES**) Permits that requires the owners and/or operators of separate **sanitary sewer** systems that discharges directly and/or indirectly to the District's facilities (**satellite entities**) to implement measures in addition to those required under the **SSA** if excessive I/I causes or contributes to **sanitary sewer overflows** (**SSOs**) and/or **basement backups** (**BBs**). In order to address the requirements set forth in the **NPDES** Permits and other federal, state and local regulations, it is the intent of this Article to set forth a regionally applied Infiltration/Inflow Control Program (Program) for the rehabilitation and correction of **sanitary sewer** system deficiencies, and for the continuation of adequate long-term sanitary sewer management and **maintenance** programs by the **satellite entities** that are tributary to the District's facilities.

§ 801. Scope and Goals

1. The purpose of this Program is to provide a framework for asset management of separate **sanitary sewer** systems to meet the following goals:

   A. Maintain infrastructure to prevent **sanitary sewer overflows** and **basement backups** due to sewer surcharging and other adverse sewer system conditions.

B. Comply with the District's **NPDES** Permits and all other applicable federal, state, and local laws and regulations.

C. Minimize extraneous flows transported to the District's facilities due to defective system components or illegal connections.

§ 802. Applicability

1. This Article applies to all **satellite entities** that own and/or operate a **sanitary sewer** system that discharges directly and/or indirectly to the District's facilities.

§ 803. General Requirements

1. All **satellite entities** shall implement and complete all Short Term Requirements as described in §804 of this **Ordinance** within five (5) years of July 10, 2014, the effective date of this Article or, for **satellite entities** that connect to the District's sewer system after the effective date of this Article, five (5) years from the date of connection. **Satellite entities** that have been notified by the District as being in compliance with the Short Term Requirements described in §804 of this **Ordinance** will be subject only to the requirement of the **Long Term Operation and Maintenance (O&M) Program** described in §805 of this **Ordinance**.

2. All **satellite entities** shall implement a **Long Term O&M Program** as described in §805 of this **Ordinance**.

3. All **satellite entities** shall submit annual reports of their progress and plans relative to their Short Term Requirements and **Long Term O&M Program** to the District as described in §806 of this **Ordinance**.

4. All **satellite entities** shall comply with the **SSA** and applicable federal, state, and local laws and regulations.

5. All **satellite entities** shall prioritize corrective action with the goal of preventing **SSOs, BBs** and system failures.

6. All **satellite entities** shall develop an adequate funding mechanism that will ensure program sustainability.

§ 804. Short Term Requirements

1. Each **satellite entity** shall complete the following Short Term Requirements:

A. Conduct a Sewer System Condition Assessment:

(1) Conduct a prioritized condition assessment of high risk public **sanitary sewer** system infrastructure through various inspection and testing methods. The assessment shall prioritize: (a) areas with **SSOs** and/or **BBs**; (b) areas upstream of **SSOs** and **BBs**; (c) sub-basins known to surcharge; (d) areas with excessive wet weather flows and/or excessive lift station pumpage; and (e) areas with system deficiencies that could result in system failure.

(2) Recent documented condition assessment(s) can be used as credit toward this assessment.

(3) Utilize inspections to catalog illegal connections in high wet weather areas for disconnection in Private Sector Program.

B. Conduct Sewer System Rehabilitation:

(1) Utilize assessment data to identify rehabilitation needs and begin development of a Capital Improvement Program (CIP) based on severity of condition.

(2) Begin addressing high priority deficiencies according to CIP plan within three (3) years.

(3) Disconnect direct and indirect cross connections identified during inspections within one year of identification.

(4) Repair uncovered or broken service lateral cleanout caps within one year of identification.

C. Develop and submit to the District for approval a **Private Sector Program (PSP**) that addresses disconnection of illegal private inflow sources and removal of infiltration due to private laterals.

D. Develop and submit to the District for approval a **Long Term O&M Program** conforming to §805.3 of this **Ordinance**.

2. The District will support **satellite entities'** efforts by providing the following:

A. The District will complete an interceptor capacity allocation analysis to inform communities of built capacity and set maximum allowable flow rates.

B. The District will work with the Council of Government organizations to encourage consolidation of Information Technology platform with secure access to provide **satellite entities** access to Geographic Information System (GIS), Computerized Maintenance and Management System (CMMS) platforms and a customer support system software that tracks reports from the **satellite entities** regarding sewer service.

C. The District will work with the Council of Government organizations to encourage cross-community cleaning, inspection and repair contracts that offer an economy of scale to **satellite entities**.

D. The District will seek unit pricing for flow monitoring and look into providing software tracking of flow information to interested communities.

E. The District will continue meeting with the Advisory Technical Panel (ATP) to provide templates and guidance documents for this program.

§ 805. Long Term O&M Program

1. Under this Program the **satellite entities** will develop a comprehensive operation and **maintenance** program to prevent **SSOs** and **BBs** by removing I/I sources, addressing deficiencies of their **sanitary sewer** system, maintaining and restoring system capacity, and preventing system failures. This plan will include an adequate funding mechanism for the program.

2. Each **satellite entity** shall implement the **Long Term O&M Program** and **PSP** developed and approved under §804 of this **Ordinance**.

3. The **Long Term O&M Program** must include the following elements:

   A. Sewer System Management: Adequate and trained/qualified staff will be provided to implement all aspects of the **Long Term O&M Program**. Staff will be periodically trained for safety, sewer inspection, **maintenance** and rehabilitation work. Records of all work completed under the **Long Term O&M Program** will be maintained.

   B. Sewer System Map: The sewer system map will be maintained and updated on an annual basis.

   C. Sewer System Inspection: A continuous inspection program will be implemented to assess the condition of the system, identify I/I sources, and keep the system map current. Results of the inspections will be utilized to prioritize system **maintenance** and rehabilitation work.

D. Sewer System **Maintenance**: A continuous **maintenance** program will include sewer cleaning and other preventive **maintenance** work required as a result of the inspection program. The **maintenance** work performed will maintain system capacity.

E. Sewer System Rehabilitation: A continuous rehabilitation program will correct system defects and deficiencies found as a result of the inspection program. The rehabilitation work performed will address the removal of I/I sources, ensure system integrity, and restore system capacity.

F. Sewer System Capacity Evaluation: Periodic evaluations will be made to determine if adequate capacity exists within the system and identify areas of inadequate capacity.

G. Material and Equipment: Adequate and proper material and equipment will be provided to implement all aspects of the **Long Term O&M Program**. The materials will be periodically inspected to assure that an adequate supply is available and in a working condition.

H. A CIP will be developed and updated as additional deficiencies are identified under the inspection program. The CIP will detail a plan and schedule to address all long term corrective work.

I. The **PSP**, which addresses disconnection of illegal private inflow sources and removal of infiltration due to private laterals.

J. A plan for funding all aspects of the **Long Term O&M Program** and the **PSP** will be provided.

4. Each **satellite entity** shall consult the Technical Guidance Manual for additional details regarding the **Long Term O&M Program** requirements.

§ 806. Annual Reporting

1. All **satellite entities** shall submit to the District Annual Reports of their progress and plans relative to their Short Term Requirements and **Long Term O&M Program**. Annual Reports must be submitted regardless of the degree of progress made during the reporting period. Among other uses, the District will utilize the Annual Reports to prepare and distribute an annual status report regarding progress made by the **satellite entities** on their I/I identification and removal efforts.

2. During the first five (5) years after the effective date of this Article, or during the first five (5) years after the date of connection for **satellite entities** that connect to the District's sewer system after the effective date of this Article, **satellite entities** must demonstrate the following:

   A. Completion of their Short Term Requirements described in §804.1.A and §804.1.B of this **Ordinance**.

   B. Development of their **PSP** described in §804.1.C of this **Ordinance**.

   C. Development of their **Long Term O&M Program** described in §804.1.D of this **Ordinance**.

3. **Satellite Entities** shall demonstrate that they are implementing their **PSP** and **Long Term O&M Program** by summarizing the following items on Annual Report forms provided by the District. :

   A. Public and private sector **SSOs** and **BBs**.

   B. **Sanitary sewer** system inspection, **maintenance** and rehabilitation activities.

   C. All completed rehabilitation projects.

   D. All completed CIP work.

§ 807. Non-Compliance

1. Any **satellite entity** may be found to be in non-compliance with this Article for the following reasons:

   A. Failure to demonstrate adequate annual progress toward implementing and completing the Short Term Requirements described in §804 of this **Ordinance** within five (5) years of the effective date of this Article or, for **satellite entities** that connect to the District's sewer system after the effective date of this Article, within five (5) years from the date of connection.

   B. Failure to demonstrate adequate implementation of the approved **Long Term O&M Program** as described in §805 of this **Ordinance**.

   C. Failure to demonstrate adequate implementation of the approved **PSP** described in §804.1.C of this **Ordinance**.

   D. Failure to submit an Annual Report or submission of an Annual Report that does not meet the requirements of §806 of this **Ordinance**.

E. Failure to otherwise comply with any provision of this Article.

§ 808. Administrative Proceedings: Notice of Non-Compliance

1. Whenever it shall appear to the **Director of Engineering** that non-compliance with a provision of this Article exists, the **Director of Engineering** shall, as soon as practical, issue a written **Notice of Non-Compliance (NONC)** to the **satellite entity** responsible for the apparent non-compliance. The **NONC** shall advise the **satellite entity** of the nature of the non-compliance and shall require the **satellite entity** to investigate the alleged non-compliance, determine remediation measures, and develop a schedule to correct the non-compliance. The **NONC** may be sent via Certified Mail, Return Receipt Requested, or may be served personally by a representative of the **District** to the **satellite entity**, or its representative.

2. The **Director of Engineering** may request a conciliation meeting concurrent with the issuance of a **NONC** for the purpose of investigating the **NONC** and for establishing a compliance schedule. In the event a conciliation meeting is not requested by the **Director of Engineering**, the **satellite entity** may request a conciliation meeting within seven (7) calendar days of receipt of a **NONC**. The **Director of Engineering** shall use his or her best efforts to convene the conciliation meeting within forty-five (45) calendar days of issuance of the **NONC**. During conciliation proceedings, the **satellite entity** may be required to furnish the **District** with such information as is reasonably necessary to demonstrate compliance with this Article. The **Director of Engineering** may continue the conciliation meeting from time to time as deemed necessary to further compliance with this Article.

3. A **satellite entity** engaging in conciliation proceedings with respect to a **NONC** shall submit a **compliance report and schedule** to the **Director of Engineering** within sixty (60) calendar days after the conciliation meeting, or upon such further date as determined appropriate by the **Director of Engineering**. In the event that no conciliation meeting is held, the **satellite entity** shall submit the **compliance report and schedule** within sixty (60) calendar days after the receipt of the **NONC**.

4. The **compliance report and schedule** shall establish a final compliance date, representing a date certain upon which all conditions contained in the **NONC** are remedied. The **compliance report and schedule** shall be executed by the **satellite entity** or its authorized representative and shall be certified as to accuracy and completeness.

5. Within twenty-one (21) calendar days after receipt of the **compliance report and schedule**, the **Director of Engineering** shall accept the **compliance report and schedule** as filed or shall request such further amendments to the **compliance report and schedule** as deemed necessary to insure compliance with the requirements of this Article**.**

6. No later than twenty-one (21) calendar days after the final compliance date, the **Director of Engineering** shall review the compliance status of the **satellite entity** and shall advise the **satellite entity** in writing whether the **satellite entity** has adequately remedied the condition(s) contained in the **NONC**.

7. If it appears to the **Director of Engineering** that the **satellite entity** subject to a **NONC** has failed to respond within forty-five (45) calendar days after service, or has failed to submit a **compliance report and schedule** acceptable to the **Director of Engineering**, or has failed to achieve compliance on or before the final compliance date, the **Director of Engineering** may at his or her discretion either issue an amendment to the **NONC** or make a Recommendation for Show Cause to the **Executive Director**. The issuance of a Recommendation for Show Cause may trigger a loss of eligibility for the **satellite entity** to receive District-sponsored funding assistance.

§ 809. Administrative Proceedings: Show Cause before the Board of Commissioners

1. Upon recommendation of the **Director of Engineering** as set forth in §808.7 of this **Ordinance**, the **Executive Director** may order the **satellite entity** to appear before the **Board of Commissioners** or its duly designated representative and show cause why the **satellite entity** should not be found in non-compliance of this Article.

2. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

§ 810. Notice of Show Cause

1. Notice to the **satellite entity** shall specify the date, time and location of a hearing to be held by the **Board of Commissioners** or its designee. The notice of the hearing shall be served personally or by registered or certified mail at least ten (10) working days before said hearing.

§ 811. Show Cause Hearing and Imposition of Penalties by the Board of Commissioners

1. The **Board of Commissioners** or its designee may conduct a Show Cause hearing.

2. The **Board of Commissioners** shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the **Board of Commissioners.** All hearing officers shall be attorneys licensed to practice law in the State of Illinois.

3. All hearings shall be on the record and any testimony taken at a hearing shall be under oath and recorded stenographically. The transcripts so recorded must be made available to any member of the public or to the **satellite entity** or party to such hearing upon payment of the usual charges for transcripts. At the hearing, the hearing officer may issue in the name of the **Board of Commissioners** notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing.

4. The **Board of Commissioners,** or the hearing officer, shall conduct a full and impartial hearing on the record, with an opportunity for the presentation of evidence and cross-examination of the witnesses.

5. For hearings conducted by a hearing officer, after all evidence has been presented, the hearing officer shall issue a report based upon the preponderance of the evidence in the record, which includes findings of fact, conclusions of law, an order, and, if non-compliance is proved, recommended penalties as detailed under §811.8 of this **Ordinance**. The Report shall be transmitted to the **Board of Commissioners**, along with a complete record of the hearing if so requested by the hearing officer or the **Board of Commissioners**.

6. The **Board of Commissioners** shall either approve or reject the report. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners.**

7. The final determination regarding the imposition of penalties rests within the sole discretion of the **Board of Commissioners**.

8. Penalties may be assessed as follows:

    A. Loss of eligibility for any funding assistance that can be provided by the District for the development and implementation of the Program as required under this Article;

    B. Loss of status as an **Authorized Municipality** as described in this **Ordinance**;

    C. Reporting of the **satellite entity's** non-compliance to the **IEPA** and/or **USEPA**; and

    D. The denial of a watershed management permit for **qualified sewer construction** as described in Article 7 of this **Ordinance**.

§ 812. Legal and Equitable Relief

1. The **General Counsel** of the **District** shall take such action deemed necessary to compel compliance with the provisions of this Article.

2. In the enforcement of this Article, the **District** shall have the authority to institute, or cause to be instituted, any and all actions, legal or equitable, including appeals, which are required for the enforcement of this Article without first exhausting the administrative remedies set forth herein.

§ 813. Injunctive Relief

1. In addition to the penalties provided in Article 8 of this **Ordinance**, whenever a **satellite entity** violates any provision of this Article or fails to comply with any order of the **Board of Commissioners**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other Court having jurisdiction, for the issuance of an injunction restraining the **satellite entity** from violating or further violating this Article or failing to comply with a Board Order.

§ 814. Judicial Review

1. The Administrative Review Act of the State of Illinois and the rules adopted under such act, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this section.

ARTICLE 9. MAINTENANCE

§ 900. General Maintenance Requirements

1. A **maintenance** plan shall be required under a **Watershed Management Permit** to provide for the perpetual **maintenance** of all of the following systems as required by §310 of this **Ordinance**:

   A. **Erosion** and **sediment control practices**;

   B. **Stormwater detention facilities**;

   C. **Stormwater** collection facilities including both **major** and **minor stormwater systems**;

   D. **Volume control practices**;

   E. **Native planting conservation areas**;

   F. **Qualified sewer construction** including service on grease basins, triple basins, and private pre-treatment facilities;

   G. **Wetland mitigation**; and

   H. **Riparian environment** mitigation.

2. The **maintenance** plan provisions shall describe inspection, **maintenance**, and monitoring activities that occur after the construction phase and continue into perpetuity.

3. Guidance on inspection, **maintenance**, and monitoring is provided in the **TGM**.

4. **Maintenance** is the responsibility of the **co-permittee** and **permittee** of the **development**. The **co-permittee** and **permittee** may delegate **maintenance** responsibility to an entity acceptable to the **permittee**; however, ultimate responsibility for **maintenance** of the facilities listed under §900.1 of this **Ordinance**, lies with the **permittee**.

5. Any amendment to the **maintenance** plan shall be submitted to and approved by the **District's Director of Engineering**.

§ 901. Permitted Facility Operation and Maintenance

1. Constructed facilities must be permanently operated and maintained by the **permittee** and **co-permittee** in accordance with the issued **Watershed Management Permit** and special conditions.

2. Permitted facilities shall not be modified, extended, replaced, eliminated or abandoned without written permission from the **District's Director of Engineering.**

3. It shall be the duty and responsibility of every **permittee** to whom a **Watershed Management Permit** has been issued for the construction and operation of any facility or sewer connection under this **Ordinance** to keep said facility or sewer connection in a proper state of repair and **maintenance** after same has been completed and placed in operation.

4. No permits shall be issued for the construction, extension, operation and **maintenance** of private **sewage** treatment plants, oxidation ponds or other treatment facilities unless accompanied by a bond with sufficient surety for proper construction, extension, operation and **maintenance** of any such treatment plant, oxidation pond, or other **sewage** treatment facility located within the corporate boundaries of the **District**. The bond shall conform to all of the following requirements:

    A. The bond shall terminate upon connection of said **sewage** treatment plant, oxidation pond, or other **sewage** treatment facility to an intercepting sewer, or treatment plant of the **District**;

    B. The bond shall be a condition for issuing a **Watershed Management Permit**;

    C. The **co-permittee** shall provide any additional security required by the **Director of Engineering** for the life of the permit, to guarantee full and complete performance, including the execution of any and all documents that may be required in support thereof;

    D. The form and legality of the bond must be approved by the Law Department of the **District**; and

    E. The engineering details of the bond must be approved by the **Director of Engineering**.

§ 902. Maintenance Requirements for Stormwater Projects With No Permittee

1. For stormwater projects located within unincorporated areas, which do not have an assigned **permittee**, as outlined in §301.1.B(2) of this **Ordinance**, constructed **stormwater facilities** (**volume control practices** and **detention facilities**) must be permanently operated and maintained by the **co-permittee** in accordance with the issued **Watershed Management Permit** and special conditions.

2. **Stormwater facilities** shall not be modified, extended, replaced, eliminated or abandoned without written permission from the **District's Director of Engineering.**

3. The **co-permittee** shall ensure inspections occur on a regular basis, and adequate funding is allocated for proper operation and **maintenance** responsibilities. An estimate of O&M costs shall be submitted with the **maintenance** plan, and the **co-permittee** shall demonstrate an adequate funding mechanism is in place to cover future expenditures, as adjusted for inflation over time. The above documents shall be recorded with **Cook County**.

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ARTICLE 10. INSPECTIONS

§ 1000. General

1. The **District** may periodically inspect any **development** or **qualified sewer construction** under the **District's** scope of regulation as outlined in §200 of this **Ordinance**.

2. The **District** may periodically inspect any **development** or **qualified sewer construction** requiring a **Watershed Management Permit** as outlined in §201 of this **Ordinance**.

3. An **authorized municipality** shall periodically inspect any **development** in its jurisdiction requiring a **Watershed Management Permit** as outlined in §201.1 of this **Ordinance**.

4. Inspections shall verify compliance with this **Ordinance** and issued **Watershed Management Permits**. Typical inspections may occur on the following milestones:

   A. After mobilization and installation of initial **erosion and sediment control practices,** prior to any soil disturbance;

   B. During excavation for the construction of **qualified sewer construction**, **major stormwater systems** and **detention facilities**;

   C. Completion of the **development** or **qualified sewer construction.**

5. The **District** may enter upon any **development** subject to this **Ordinance** to conduct inspections as outlined in §205.1 of this **Ordinance**.

§ 1001. Inspection Requirements to be Met by Development

1. Prior to commencement of construction under a **Watershed Management Permit**, the **co-permittee** shall give, or cause to be given, to the **District** or relevant **authorized municipality**, an advance notice of at least two (2) working days of the milestones described in §1000.4 of this **Ordinance**.

2. All construction shall be in accordance with the plans and specifications made part of a **Watershed Management Permit**. The **Watershed Management Permit** together with a set of the plans and specifications for the project shall be kept on the job **site** at all times during construction, until final inspection and approval by the **District** or relevant **authorized municipality**

3. All construction shall be inspected and approved by a **Professional Engineer** acting on behalf of the **permittee** or the **owner** of the project, or by the duly authorized representative of the **Professional Engineer**.

4. No sewer trenches or **major stormwater systems** shall be backfilled except as authorized by the inspection engineer and the **District** Inspector after having inspected and approved the sewer installation.

5. Construction records may be inspected at any time during the project to demonstrate ongoing compliance with this **Ordinance** and any issued **Watershed Management Permits**. Such records may include, but are not limited to:

   A. The stormwater pollution prevention plan with associated inspection reports;

   B. A copy of the latest revised construction drawings;

   C. The project construction schedule;

   D. Project construction photography; and

   E. Copies of other federal, state, and local permits.

6. Where construction is performed without advance notice to the **District** or relevant **authorized municipality**, as required in §1001.1 of this **Ordinance**, the **District** or relevant **authorized municipality** will assume that the construction does not comply with the applicable **Ordinance** requirements. Any portion of the construction performed without the requisite advance notice shall be exposed by the **owner**, at his expense, in at least one location between every two manholes, two terminal points or as directed by the **District** for visual inspection by the **District** to insure compliance with applicable requirements as to materials and workmanship.

§ 1002. Special Requirements for Qualified Sewer Construction

1. In addition to the inspection requirements of §1001 of this **Ordinance**, the requirements of this section shall apply to **qualified sewer construction**.

2. **Testing -** All sewers constructed under the **Watershed Management Permit** issued by the **District** shall be subject to inspection, testing and approval by the **District** to insure compliance with the **Ordinance**. All testing shall be made, or caused to be made, by the **permittee** or **co-permittee** at no cost to the **District** and in the presence of the **District** inspector or representative.

3. **Backfilling -** No sewer trenches shall be backfilled except as authorized by the **District** inspector after having inspected and approved the sewer installation. The inspector shall signify his approval and authorization for backfilling on the inspection report. The inspection report shall be on the job site at all times, and shall bear the signature of the **co-permittee's** engineer, identifying those portions of the sewer inspected and approved by him. The inspection report shall be made available to the **District** for the inspector's review.

§ 1003. Request for Final Inspection

1. Prior to completion of construction, the **co-permittee** shall submit to the **District** a properly executed Request for Final Inspection and approval on the form prescribed by the **District**.

2. The **co-permittee** shall provide the **District** inspector an advance notice of at least two (2) working days prior to final inspection.

3. No sewer shall be put in service until it has been approved by the **District**, and until all facilities (excluding landscaping) required as conditions of the **Watershed Management Permit** are satisfactorily constructed and completed.

4. Refer to the **TGM** for further details regarding the administration of the request for final inspection.

5. Record Drawings. Prior to final inspection and approval by the **District**, the **co-permittee** shall furnish or cause to be furnished to the **District**, a set of **record drawings**.

6. Recordation. Prior to final inspection and approval, the **co-permittee** shall provide a copy of the recorded documents described under §308.9 of this **Ordinance**. In the event the **co-permittee** does not provide a copy of the recorded documents described under §308.9 of this **Ordinance**, the **District** may record such document at the cost of the **co-permittee**.

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ARTICLE 11. VARIANCES

§ 1100. Authority

1. Only the **District** may grant **variances** from the requirements of this **Ordinance** as set forth herein; an **authorized municipality** shall not grant **variances** from the requirements of this **Ordinance**.

2. The **variance** procedure is intended to provide a narrowly circumscribed means by which relief may be granted from the requirements of this **Ordinance**.

§ 1101. Petition for Variance

1. A request for a **variance** shall be filed as a petition by the **co-permittee** and shall be filed with the Clerk of the **District,** at 100 East Erie Street, Chicago, Illinois 60611.

2. At the time of filling the petition, the **co-permittee** shall pay a **variance** filing fee. The **District** permit fees, including **variance** filing fees, are contained in Appendix F of this **Ordinance**.

3. All **variance** petitions shall contain the following information including, but not limited to:

   A. The **co-permittee**'s notarized signature on the petition;

   B. A letter of no objection to the **variance** request from the **permittee** or, if the **development** is located in an unincorporated area, from the appropriate unit of local government;

   C. The names and addresses of all professional consultants advising the **co-permittee** regarding the petition;

   D. The address(es), plat of survey, and legal description of the **site**;

   E. The names and address(es) of all **owners** of record within two-hundred fifty (250) feet of the **site**;

   F. The specific feature(s) of the proposed **development** that requires a **variance**;

   G. The specific provision(s) of this **Ordinance** from which a **variance** is being requested and the precise variation being sought;

   H. A detailed statement of the characteristics of the **development** that prevent it from complying with this **Ordinance**;

I. A detailed statement of the minimum **variance** from the provisions of this **Ordinance** that would be necessary to permit the proposed construction or **development**; and

J. A detailed statement describing how the requested **variance** satisfies each of the criterion provided in §1103.1 of this **Ordinance**.

§ 1102. Co-Permittee's Notice of Petition

1. Within seven (7) calendar days after the petition for **variance** is filed with the Clerk of the **District**, the **co-permittee** shall publish at least one notice of such petition in a newspaper that is published in **Cook County** with a general circulation in the vicinity of the **site** of the proposed **development** for which a **variance** is requested.

2. Within seven (7) calendar days after the petition for **variance** is filed with the Clerk of the **District**, the **co-permittee** shall mail notice via certified mail, return receipt requested, of such petition to all **owners** of record located within two-hundred fifty (250) feet of the **site** of the proposed **development** for which a **variance** is requested, and to any other **persons** in the vicinity of the proposed **development** that the **co-permittee** has knowledge of or believes may potentially be affected by the requested **variance**.

3. Within seven (7) calendar days after the petition for **variance** is filed with the Clerk of the **District**, the **District** shall publish such petition for **variance** on its website.

4. All notices required by this section shall include the following:

   A. The street address of the **development**, or if there is no street address, then the legal description and the location with reference to any well-known landmarks, highway, road or intersection;

   B. A description of the requested **variance**;

   C. A statement that any **person** may submit written comments regarding the petition for **variance** to the Clerk of the **District** within twenty-one (21) calendar days after the publication and mailing of notice; the notice shall include mailing information for said comments as follows:

      Metropolitan Water Reclamation District of Greater Chicago,
      Clerk of the District**,** 100 East Erie Street, Chicago, Illinois 60611;

   D. A statement that copies of the petition for **variance** are available upon request from the **co-permittee**;

E. A statement that any and all documents that concern the petition for **variance**, which are subject to public disclosure, will be made available for inspection by the **co-permittee** at a readily accessible location; the notice will include the address where said inspection of documents will take place together with the name and telephone number of the **person** responsible for making the records available for inspection; and

F. Any additional information considered necessary or proper.

5. Within seven (7) calendar days after the publication of notice, the **co-permittee** shall submit to the Clerk of the **District** a certification of publication and shall attach a copy of the published notice.

6. Within seven (7) calendar days after mailing of notice to **owners** of record as described in §1102.2 of this **Ordinance**, the **co-permittee** shall submit to the Clerk of the **District** a notarized affidavit listing the addresses to which notices were mailed and certifying to the completeness of the list to the best of the **co-permittee's** knowledge and belief.

§ 1103. Standards

1. The **District** may grant a **variance** when it is consistent with the general purpose and intent of this **Ordinance** and when the **development** meets the requirements as specified in §501.1 of this **Ordinance** and all of the following conditions:

A. Granting the **variance** shall not alter the essential character of the area involved, including existing stream uses;

B. Failure to grant the **variance** would create an exceptional hardship on the **co-permittee;** economic hardship of the **co-permittee** alone shall not constitute exceptional hardship;

C. The relief requested is the minimum necessary and there are no means other than the requested **variance** by which the alleged hardship can be avoided or remedied to a degree sufficient to permit the reasonable continuation of the **development**;

D. The **co-permittee**'s circumstances are unique and do not represent a general condition or problem;

E. The **development** is exceptional when compared to other **developments** that have met the provisions of this **Ordinance**;

F. A **development** proposed within a **flood protection area** could not be constructed if it were located outside the **flood protection area**;

G. The **co-permittee**'s circumstances are not self-imposed; and

H. Granting the **variance** shall not result in any of the following:

(1) Increase in the **regulatory floodplain** elevation, unless a **CLOMR** is issued by **FEMA**;

(2) Additional threats to public safety;

(3) Extraordinary public expense;

(4) Nuisances, fraud, or victimization of the public, or;

(5) Conflict with existing laws or ordinances.

2. The **District** shall not grant **variances** for any **development** that is within a **regulatory floodway**, **jurisdictional wetland**, or **Jurisdictional Waters of the U.S.** unless such **variance** meets or exceeds federal and/or state required minimum standards for **development** in such areas. The **co-permittee** shall be responsible for obtaining all applicable federal and/or state permits before any such **variance** is granted.

3. The **District** shall not grant **variances** that would violate the minimum standards for **floodplain** management established by the **OWR** and the requirements of **FEMA** for participation in the **NFIP**.

§ 1104. Submission of Written Comments

1. Any **person** may submit written comments regarding the petition for **variance** to the Clerk of the **District** within twenty-one (21) calendar days after the publication and mailing of notice by the **co-permittee**.

2. Written comments should be mailed to: Metropolitan Water Reclamation District of Greater Chicago, Clerk of the District, 100 E. Erie Street, Chicago, Illinois 60611.

3. The **District** shall take into consideration all written comments received regarding a petition for **variance**.

§ 1105. Determination by the District

1. After closure of the written comment period specified in §1104 of this **Ordinance**, the Clerk of the **District** shall forward to the **Director of Engineering**:

A. The petition for **variance**;

B. Copies of all notices; and

C. Copies of all written comments received.

2. The **Director of Engineering** shall review the petition for **variance** and prepare a report recommending one of the following actions**:**

A. Grant the petition for **variance**; or

B. Grant the petition for **variance** with conditions; or

C. Deny the petition for **variance.**

The report must also include the items listed under §1104 of this **Ordinance**, and the **Director of Engineering** must forward the report to the **Board of Commissioners** for consideration.

3. Within thirty (30) calendar days after the **Board of Commissioners**' receipt of the petition for **variance**, the **Board of Commissioners** shall review the petition for **variance** and determine whether the petition for **variance** shall be heard by the **Board of Commissioners** itself or by its designee in a **variance** hearing.

4. The Clerk of the **District** shall promptly notify the **co-permittee** in writing of the **Board of Commissioners**' determination regarding who shall hear the petition for **variance**.

5. The **Board of Commissioners** shall promulgate procedural rules that will govern hearings pursuant to this Article. All hearings conducted pursuant to this Article will also follow the requirements for show cause hearings as set forth in §1204.2 through §1204.5 of this **Ordinance**.

6. All **variance** hearings shall be concluded as soon as practicable.

7. When a **variance** hearing is conducted by the designee of the **Board of Commissioners**, the designated hearing officer shall submit the following at the conclusion of the hearing:

A. A written report to the **Board of Commissioners** containing the designated hearing officer's findings with respect to the petition for **variance**; and

B. A complete record of the **variance** hearing if requested by either the **Board of Commissioners** or by the **co-permittee** at its own expense.

8. The **Board of Commissioners** shall either approve or reject the report of the designated hearing officer. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners**.

9. The Clerk of the **District** shall notify the **permittee** and **co-permittee** of the determination of the **Board of Commissioners** by certified mail, return receipt requested within thirty (30) calendar days of the **Board of Commissioners'** determination. A denial of a **variance** request shall specify the requirements and conditions of this **Ordinance** forming the basis of the denial.

10. The Clerk of the **District** shall notify all **persons** who submitted written comments of the determination of the **Board of Commissioners** by certified mail, return receipt requested within thirty (30) calendar days of the **Board of Commissioners**' determination.

11. The Administrative Review Law of the State of Illinois, and the rules adopted under such law, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this Section.

§ 1106. Conditions

1. The **District** may grant a **variance** that differs from the relief requested when supported by the record.

2. The **District** may impose specific conditions and limitations on the **development** receiving a **variance** as the **District** deems necessary to meet the intent of this **Ordinance**.

3. Whenever a **variance** is authorized with conditions and limitations, the **permittee** and **co-permittee** shall both file a notarized affidavit with the **District**, indicating acceptance of the conditions and limitations and their agreement to comply therewith.

ARTICLE 12. PROHIBITED ACTS, ENFORCEMENT, AND PENALTIES

§ 1200. Prohibited Acts

1. It shall be unlawful for any **person** to undertake any **development** within **Cook County** that requires a **Watershed Management Permit** under this **Ordinance** without first securing a **Watershed Management Permit.**

2. It shall be unlawful for any **person** to install **qualified sewer construction** within the **District**'s corporate limits or service agreement areas that requires a **Watershed Management Permit** under this **Ordinance** without first securing a **Watershed Management Permit.**

3. It shall be unlawful for any **person** to fail to maintain systems, in whole or in part, as required:

   A. Within a **Watershed Management Permit**; and

   B. Within the **maintenance** plan of the permit as required in §900.1 of this **Ordinance**.

4. It shall be unlawful for any **person** to violate, disobey, omit, fail to maintain, or refuse to comply with or to resist enforcement of any provision of this **Ordinance** or any condition of a **Watershed Management Permit** required by this **Ordinance**.

§ 1201. Administrative Proceedings: Notice of Violation

1. Whenever it shall appear to the **Director of Engineering** that a violation of a provision of this **Ordinance** exists, the **Director of Engineering** shall, as soon as practical, issue a written **Notice of Violation (NOV)** to the **permittee/co-permittee,** and/or the **person** responsible for the apparent violation (**respondent**). The **NOV** shall advise the **respondent** of the nature of the noncompliance and shall require the **respondent** to investigate the alleged violation, determine remediation measures, and develop a schedule to correct the noncompliance. The **NOV** may be sent via Certified Mail, Return Receipt Requested, or may be served personally by a representative of the **District** at the **site**, on the **respondent** or its representative.

2. The **Director of Engineering** may request a conciliation meeting concurrent with the issuance of a **NOV** for the purpose of investigating the **NOV** and for establishing a compliance schedule. In the event a conciliation meeting is not requested by the **Director of Engineering**, the **respondent** may request a conciliation meeting within seven (7) calendar days of receipt of a **NOV**. The **Director of Engineering** shall use his best efforts to convene the conciliation meeting within forty-five (45) calendar days of issuance of the **NOV**. During conciliation proceedings, the **respondent** may be required to furnish the **District** with such information as is reasonably necessary to demonstrate compliance with the **Ordinance** or with a **Watershed Management Permit** issued thereunder. The **Director of Engineering** may continue the conciliation meeting from time to time as deemed necessary to further compliance with this **Ordinance**.

3. A **respondent** engaging in conciliation proceedings with respect to a **NOV** shall submit a **compliance report and schedule** to the **Director of Engineering** within 30 calendar days after the conciliation meeting, or upon such further date as determined appropriate by the **Director of Engineering**. In the event no conciliation meeting is held, the **respondent** shall submit the **compliance report and schedule** within forty-five (45) calendar days after the receipt of the **NOV**. The **compliance report and schedule** shall be executed by the **respondent** or its authorized representative and shall be certified as to accuracy and completeness by a **Professional Engineer**. The **compliance report and schedule** shall include a schedule that establishes a final compliance date, representing a date certain upon which all violations and conditions contained in the **NOV** are remedied. Within twenty-one (21) calendar days after receipt of the **compliance report and schedule**, the **Director of Engineering** shall accept the **compliance report and schedule** as filed or shall request such further amendments to the **compliance report and schedule** as deemed necessary to insure compliance with the requirements of the **Ordinance** or **Watershed Management Permit**.

4. Representatives of the **District** may, during reasonable hours, enter upon the **site** of any **development** subject to a **NOV** for purposes of inspecting the **development** that is the subject of the **NOV** and/or for verifying compliance with a **compliance report and schedule** submitted pursuant to §1201.3 of this **Ordinance**. Inspections shall be conducted in accordance with the provisions of this **Ordinance** concerning Right of Access as set forth in §205 of this **Ordinance**. An inspection fee of $250.00 shall be charged by the **District** for each onsite inspection made by the **District** pursuant to this section.

5. No later than twenty-one (21) calendar days after the final compliance date, the **Director of Engineering** shall review the compliance status of the **respondent** and shall advise the **respondent** in writing whether **respondent** has adequately remedied the violation(s) contained in the **NOV**.

6. If it appears to the **Director of Engineering** that a **person** subject to a **NOV** has failed to respond within 30 calendar days after service, or has failed to submit a **compliance report and schedule** acceptable to the **Director of Engineering**, or has failed to achieve compliance on or before the final compliance date, the **Director of Engineering** may at his discretion either issue an amendment to the **NOV** or make a Recommendation for Show Cause to the **Executive Director**.

7. Upon receipt of an **NOV**, the **respondent** shall cease all actions that are related to or in furtherance of the alleged noncompliant activity until such time as the **NOV** is finally resolved.

Table 7 Notice of Violation (NOV)

Section	Action	By	When
1201.1	Issuance of **NOV**	**Director of Engineering**	Apparent violation of **Ordinance** or **Watershed Management Permit**.
1201.3	Submission of **compliance report and schedule**	**Respondent**	Within 45 calendar days after issuance of **NOV**.
1201.5	Review of **compliance report and schedule**	**Director of Engineering**	Within 21 calendar days after receipt of **compliance report and schedule.**
1201.6	Issuance of amendment to **NOV**	**Director of Engineering**	**Respondent**: 1) Does not respond 30 calendar days after service, 2) Fails to submit an acceptable **compliance report and schedule**, or 3) Fails to achieve compliance on or before the final compliance date.
1201.6	Recommendation for Show Cause to **Executive Director**	**Director of Engineering**	**Respondent**: 1) Does not respond 30 calendar days after service, 2) Fails to submit an acceptable **compliance report and schedule**, or 3) Fails to achieve compliance on or before the final compliance date.

§ 1202. Administrative Proceedings: Proceedings for Show Cause Before the Board of Commissioners

1. Upon recommendation of the **Director of Engineering** as set forth in §1201.6 of this **Ordinance**, the **Executive Director** may order the **respondent** to appear before the **Board of Commissioners** or its duly designated representative and show cause why the **respondent** should not be found in violation of this **Ordinance**.

2. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

§ 1203. Notice of Show Cause

1. Notice to the **respondent** shall specify the date, time and location of a hearing to be held by the **Board of Commissioners** or its designee. The notice of the hearing shall be served personally or by registered or certified mail at least ten (10) working days before said hearing. In the case of a **municipality** or a corporation, said service shall be upon an officer or agent thereof.

§ 1204. Show Cause Hearing and Imposition of Civil Penalties by Board of Commissioners

1. The **Board of Commissioners** or its designee may conduct a Show Cause hearing.

2. The **Board of Commissioners** shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the **Board of Commissioners.** All hearing officers shall be attorneys licensed to practice law in the State of Illinois.

3. All hearings shall be on the record and any testimony taken at a hearing shall be under oath and recorded stenographically. The transcripts so recorded must be made available to any member of the public or to the **respondent** or party to such hearing upon payment of the usual charges for transcripts. At the hearing, the hearing officer may issue in the name of the **Board of Commissioners** notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing.

4. The **Board of Commissioners,** or the hearing officer, shall conduct a full and impartial hearing on the record, with an opportunity for the presentation of evidence and cross-examination of the witnesses.

5. For hearings conducted by a hearing officer, after all evidence has been presented, the hearing officer shall issue a report based upon the preponderance of the evidence in the record, which includes findings of fact, conclusions of law, an order, and, if violations are proved, recommended penalties as detailed under §1204.8 of this **Ordinance**. The Report shall be transmitted to the **Board of Commissioners**, along with a complete record of the hearing if so requested by the hearing officer or the **Board of Commissioners**.

6. The **Board of Commissioners** shall either approve or reject the report. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners.**

7. The final determination regarding the imposition of penalties, and the amount thereof, rests within the sole discretion of the **Board of Commissioners**.

8. Penalties and costs shall be assessed as follows:

   A. Civil penalties shall be assessed at the level of $100.00 and no more than $1,000.00 per day of violation; each day's continuation of such violation or failure to abide by the terms of this **Ordinance** is a separate offense;

   B. An inspection fee of $250.00 shall be assessed by the **District** for each onsite inspection made by the **District** to ascertain or confirm compliance by a violator hereunder with the construction, operation and **maintenance** provision of this **Ordinance** or permit issued pursuant to this **Ordinance;** such inspection(s) shall be made when requested by the **permittee/co-permittee**, or if no such request(s) is(are) made, then upon the compliance date established by an order of the hearing officer and thereafter as circumstances may reasonably require; and

   C. After a hearing on an alleged violation the hearing officer or **Board of Commissioners** may, in addition to any other penalties imposed, order any **person** found to have committed a violation to reimburse the **District** for the costs of the hearing, including any expenses incurred for the inspection, sampling, analysis, document preparation, administrative costs, court reporter, and attorney fees.

9. All penalties specified by the **District** shall be paid within thirty (30) days after the party on whom it is imposed receives a written copy of the order of the **Board of Commissioners**, unless the **person** to whom the order is issued seeks judicial review of the order, and obtains a stay of the decision from the circuit court in accordance with the Administrative Review Act.

10. All unpaid penalties shall be considered in arrears thirty (30) days after the date of the order.

11. The Administrative Review Act of the State of Illinois, and the rules adopted under such act, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this section.

§ 1205. Revocation of Watershed Management Permits

1. In addition to the provisions for administrative and legal proceedings contained in this Article 12 of this **Ordinance**, whenever the **Executive Director** determines that a **person** to whom a **Watershed Management Permit** has been issued has wholly failed to remedy the violations stated in a **NOV** issued pursuant to this **Ordinance**; or whenever a **person** has failed to comply with an order of the **Board of Commissioners** issued pursuant to this **Ordinance**; or has failed to comply with a substantive order of a court entered in litigation initiated by the **District**, the Office of the State's Attorney or the United States Attorney, against such **person** for noncompliance with this **Ordinance**; or has failed to promptly pay all civil penalties, inspection fees, or other costs assessed against such **person** in any action taken by the **District**, the **Executive Director** may order such **person** to show cause before the **Board of Commissioners** why the **Watershed Management Permit** should not be revoked, except in circumstances where a properly filed appeal is pending.

§ 1206. Stop-Work Order

1. The **District**, upon the **Director of Engineering**'s determination, as set forth herein, is authorized to issue an order requiring the suspension of construction of a **development** that is subject to this **Ordinance**.

2. A stop-work order shall:

   A. Be in writing;

   B. Indicate the reason for its issuance; and

   C. Order the action, if any, necessary to resolve the circumstances requiring the stop-work order.

3. One copy of the stop-work order shall be posted on the property in a conspicuous location and one copy shall be delivered by Registered Mail, Return Receipt Requested, or personal delivery to the **permittee/co-permittee**, and/or to the property **owner** or his/her agent.

4. The stop-work order shall state the conditions under which the construction of the subject **development** may be resumed.

5. The **District** shall issue a stop-work order if the **Director of Engineering** determines that:

   A. **Development** is proceeding in a manner which creates imminent hazard of severe harm to **persons**, property, or the environment on or off the **site**;

B. **Development** is occurring in violation of a requirement of this **Ordinance**, or of a **Watershed Management Permit**, and the **District** has determined it is necessary to halt ongoing **development** activity to avoid continuing or additional violations and where significant costs and effort would be incurred should the offending **development** activity be allowed to continue; or

C. **Development** for which a **Watershed Management Permit** is required is proceeding without issuance of a **Watershed Management Permit**. In such an instance, the stop-work order shall state that the order terminates when the required **Watershed Management Permit** is properly obtained.

6. Any **permittee / co-permittee**, and/or property **owner** aggrieved by the issuance of a stop-work order may appeal the stop-work order as outlined in Article 13 of this **Ordinance**.

§ 1207. Additional Remedies for Flood Protection Areas

1. Upon the unauthorized excavation, filling, or modification of a **flood protection area** by any **person**, the **District** may petition the circuit court for an order to restore the **parcel** to its prior condition in order to lessen or avoid the imminent threat to public health, safety, or welfare, or damage to property or the environment resulting from the accumulation of **runoff** of **stormwater** or floodwater, or loss of beneficial function.

2. When, after a diligent search, the identity or whereabouts of the **owner**(s) of any such **parcel(s)**, including lien holders of record, are not ascertainable, notice mailed to the **person** in whose name the real estate was last assessed for taxes, constitutes sufficient notice.

3. The reasonable costs of restoration of the **flood protection area** that are incurred by the **District** shall be recoverable from the **owner** of such real estate in a civil action, together with court costs and other expenses of litigation.

§ 1208. Legal and Equitable Relief

1. The **General Counsel** of the **District** shall take such action deemed necessary to enforce collection and payment of all costs and penalties, to restrain violations of, and to compel compliance with the provisions of this **Ordinance** and with the conditions of any **Watershed Management Permit** issued hereunder.

2. In the enforcement of this **Ordinance**, the **District** shall have the authority to institute, or cause to be instituted, any and all actions, legal or equitable, including appeals, which are required for the enforcement of this **Ordinance** without first exhausting the administrative remedies set forth herein.

§ 1209. Injunctive Relief

1. In addition to the penalties provided in Article 12 of this **Ordinance**, whenever a **person** violates any provision of this **Ordinance** or fails to comply with any order of the **Board of Commissioners**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other Court having jurisdiction, for the issuance of an injunction restraining the **person** from violating this **Ordinance** or failing to comply with the Board Order from making further violations.

2. Notwithstanding any remedies that the **District** may have by statute, common law, or this **Ordinance**, when, in the determination of the **Executive Director**, the construction, operation, **maintenance**, **ownership** or control of any **development** subject to this **Ordinance** presents an imminent danger to the public health, welfare or safety, presents or may present an endangerment to the environment, is in violation of this **Ordinance**, or threatens to interfere with the operation of the sewerage system of a **water reclamation facility** under the jurisdiction of the **District**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other Court having jurisdiction, for injunctive relief to cease and desist such activities without first exhausting administrative remedies set forth herein.

ARTICLE 13. APPEALS

§ 1300. Right to Appeal

1. Any **person** subject to this **Ordinance**, or his/her authorized representative, shall have a right to appeal the following to the **Director of Engineering**:

   A. The denial of a **Watershed Management Permit**;

   B. The conditions imposed in a **Watershed Management Permit**; and

   C. The issuance of a stop-work order.

2. Any **person** contesting any final decision, order, requirement, or determination of the **Director of Engineering** made pursuant to §1300.1 of this **Ordinance** shall have the right to appeal to the **Board of Commissioners**.

§ 1301. Appeals to the Director of Engineering

1. All appeals to the **Director of Engineering** shall be made in writing and shall specify the reasons for the appeal. For appeals regarding permit denials or permit conditions, the appeal must be served upon the **Director of Engineering** within 60 calendar days from the date of denial or conditional issuance of a **Watershed Management Permit**. An appeal of the issuance of a stop-work order must be served upon the **Director of Engineering** within 14 calendar days from the date of posting of the stop-work order.

2. The **Director of Engineering** will use his/her best efforts to respond in writing to a request for an appeal within 30 calendar days of the receipt of a request from the **appellant** and shall schedule an appeal meeting in the letter responding to the request. In the case of an appeal of the issuance of a stop-work order, the **Director of Engineering** shall use his/her best effort to schedule and conduct an appeal meeting within 30 calendar days of receipt of the request for appeal.

3. When a meeting is scheduled by the **Director of Engineering**, the **appellant** must submit all information pertinent to the appeal. This information must be submitted to the **Director of Engineering** at least 14 calendar days prior to the scheduled appeal meeting. In the case of an appeal of the issuance of a stop-work order, the **appellant** must submit all information pertinent to the appeal contemporaneously with the request for appeal.

4. The **Director of Engineering** will conduct an appeal meeting and attempt to resolve any bona fide claims, disputes, or inquiries the **appellant** may have. All determinations made by the **Director of Engineering** shall be in writing and a copy thereof transmitted to the **appellant**. The **Director of Engineering** will use his/her best efforts to transmit these determinations to the **appellant** within 60 calendar days of the appeal meeting. Determinations regarding the appeal of the issuance of a stop-work order shall be transmitted to the **appellant** within 14 days of the appeal meeting.

5. Should the **appellant** fail to appear at the scheduled appeal meeting, another appeal meeting will not be scheduled unless the **appellant** requests such a meeting, in writing to the **Director of Engineering**, not later than 30 calendar days after the date of the initially scheduled appeal meeting. A second appeal meeting may be granted at the discretion of the **Director of Engineering** upon a finding of good cause as to why the initial appeal meeting was missed. If a properly filed request for a second appeal meeting under this section is denied by the **Director of Engineering**, the **appellant** may file an appeal to the **Board of Commissioners** for the sole purpose of determining the propriety of the **Director of Engineering's** denial. If the **Board of Commissioners** grant the **appellant**'s request, then the matter shall be remanded for an appeal by the **Director of Engineering** under the provisions of this section.

6. Any **person** who has been issued a **Watershed Management Permit**, and who appeals a condition contained in that permit, may commence construction of the subject **development** prior to a resolution of the appeal. However, any commencement of construction must comply with all of the terms and conditions of the **watershed management permit** as issued to said **person**, and not otherwise in violation of this **Ordinance**.

7. Any **person** whose request for a **Watershed Management Permit** was denied by the **District** or by an **authorized municipality** is prohibited from commencing construction of the subject **development** during the pendency of an appeal. Under no circumstances can construction commence prior to the issuance of a **Watershed Management Permit**.

8. Any **person** who requests an appeal of the issuance of a stop-work order must suspend construction of the subject **development** while the appeal is pending.

§ 1302. Appeals to the Board of Commissioners

1. In the event that the **appellant** does not concur with the determination of the **Director of Engineering**, the **appellant** may petition the **Board of Commissioners** for a hearing. Any petition requesting a hearing by the **Board of Commissioners** shall be made by the **appellant** within 30 calendar days after receipt of the determination by the **Director of Engineering** pursuant to §1301 of this **Ordinance**.

2. This petition must be in writing by the **appellant** and sent to the **President of the Board of Commissioners**, at 100 East Erie Street, Chicago, Illinois 60611, with a copy to the **Director of Engineering**. Within 30 calendar days after receipt of this petition, the **Director of Engineering** will advise the **appellant** in writing regarding the date on which the **Board of Commissioners** will consider the petition made by the **appellant**.

3. The **Board of Commissioners** shall review this petition and determine whether the petition for an appeal shall be heard by the **Board of Commissioners** itself or by its designee.

4. The **Board of Commissioners** shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the **Board of Commissioners**. All hearing officers shall be attorneys licensed to practice law in the State of Illinois.

5. The **Director of Engineering** will promptly notify the **appellant** in writing of the **Board of Commissioners**' determination of who shall hear the appeal.

6. The **Board of Commissioners** shall not grant an appeal if the **appellant** failed to timely file an appeal with the **Director of Engineering**.

7. When an appeal hearing is conducted by the designee of the **Board of Commissioners**, the designated hearing officer shall submit a written report of his or her findings to the **Board of Commissioners** with respect to such appeal. The hearing officer must also submit a complete record of the appeal hearing if requested by the **Board of Commissioners** or by the **District** or by the **appellant**, at its own expense.

8. The **Board of Commissioners** shall either approve or reject the report of the designated hearing officer. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners**.

9. The scope of any hearing conducted under this section shall be limited to the issues raised by the **appellant** in the **Director of Engineering's** appeal meeting. Technical information that was not submitted by the **appellant** to the **Director of Engineering** under §1301 of this **Ordinance** shall not be utilized in a hearing before the **Board of Commissioners** or its designee.

10. All appeal hearings before the **Board of Commissioners** or the designated hearing officer shall be concluded as soon as practicable.

11. Determinations by the **Board of Commissioners** or its designee shall be effective immediately. The **District** shall provide the final decision and order of the **Board of Commissioners** in writing to the **appellant** within 30 calendar days of entry.

12. Final decisions of the **Board of Commissioners** are subject to the Administrative Review Act.

13. Any **person** who requests an appeal to the **Board of Commissioners** under this section must maintain the status quo during the pendency of the appeal and shall not take any action in contravention of the determination of the **Director of Engineering**.

14. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

ARTICLE 14. ADMINISTRATION

§ 1400. Responsibility for Administration

1. The **District** has the authority and responsibility for the administration of this **Ordinance**.

§ 1401. Role of the District

1. The role of the **District** in the administration of this **Ordinance** shall include all of the following:

    A. Supervise the execution of this **Ordinance**;

    B. Review and issue **Watershed Management Permits**;

    C. Develop and maintain the **TGM**, which will serve as a companion reference to this **Ordinance**;

    D. Notify **Cook County** governmental agencies, **municipalities**, **authorized municipalities**, **FEMA**, **OWR**, **Corps**, and **IEPA** of any amendments to this **Ordinance**;

    E. Provide inspections to ensure proper compliance with this **Ordinance**;

    F. Investigate complaints of violations of this **Ordinance**;

    G. Grant **variances**;

    H. Enforce this **Ordinance**;

    I. Hear appeals;

    J. Advise, consult with, and cooperate with other governmental entities to promote the purposes of this **Ordinance**; and

    K. Supervise **authorized municipalities**.

2. The **District** shall timely review **Watershed Management Permit** applications and respond within:

    A. Fifteen (15) working days of an initial submittal for **developments** not involving **flood protection areas**;

B. Thirty (30) working days of an initial submittal for **developments** involving **flood protection areas**; and

C. Ten (10) working days of a resubmittal.

3. The **District** reserves the right to cancel **Watershed Management Permit** applications in such a case as:

A. The **permittee** or **co-permittee** gives notice that the project has been cancelled; or

B. A resubmittal has not been received by the **District** within ninety (90) days of the **District's** issuance of its review comments. Such permit applications will be considered non-responsive and will be subject to cancellation upon notice by the **District**.

4. **Watershed Management Permit** applications that are cancelled by the **District** shall have permit fees refunded as described in §313.4 of this **Ordinance**.

§ 1402. Role of an Authorized Municipality

1. The role of an **authorized municipality** in the administration of this **Ordinance** shall include the following:

A. Issue **Watershed Management Permits** for **development** activities listed in §201.1 of this **Ordinance** and within its corporate boundaries in conformance with this **Ordinance**;

B. Provide inspections to ensure proper compliance with this **Ordinance**;

C. Investigate complaints of violations of the **Ordinance**;

D. Advise, consult with, and cooperate with other governmental entities to promote the purposes of this **Ordinance**; and

E. Follow its own policies regarding permit cancellation and fee refunds.

2. An **authorized municipality** must:

A. Have legal authority to:

(1) Perform all requirements of an **authorized municipality** under this **Ordinance;** and

(2) Adopt this **Ordinance** by reference;

B. Adopt this **Ordinance**, including all amendments, by reference;

C. Participate in the regular phase of the **NFIP**;

D. Have the ability to review and issue **Watershed Management Permits** for **development** activities in **separate sewer areas** listed in §201.1 of this **Ordinance** and within its corporate boundaries in conformance with this **Ordinance**;

E. Employ or retain by contract, adequate staff for all of the following positions:

(1) An **enforcement officer**;

(2) **Professional Engineer(s)**; and

(3) **Wetland specialist(s)**;

F. Timely review **Watershed Management Permit** applications and respond within:

(1) Fifteen (15) working days of an initial submittal for **developments** not involving **flood protection areas**;

(2) Thirty (30) working days of an initial submittal for **developments** involving **flood protection areas**; and

(3) Ten (10) working days of a resubmittal;

G. Maintain all of the following records;

(1) **Watershed Management Permits**;

(2) **Record drawings**;

(3) **Structure** improvement data;

(4) **Elevation certificates**;

(5) **Base flood** data and **base flood** maps; and

(6) **LOMC, LOMR**;

H. Transmit all records specified in §1402.2.G of this **Ordinance** to the **District** upon request;

I. Issue **Watershed Management Permits** for **development** activities listed in §201.1 of this **Ordinance** within its corporate boundaries in conformance with this **Ordinance**;

J. Inspect the construction of all **developments** which require a **Watershed Management Permit** from the **authorized municipality**;

K. Ensure inspection of all constructed volume control practices occurs on an annual basis;

L. Notify the **District** promptly for any violation within the **authorized municipality**;

M. Issue local stop work orders for all **violations**, when appropriate; and

N. Establish **Watershed Management Permit** fees for **Watershed Management Permits** reviewed and issued by the **authorized municipality**.

3. An **authorized municipality** shall not:

A. Issue **Watershed Management Permits** inconsistent with the provisions of this **Ordinance**;

B. Issue **Watershed Management Permits** for **development** activities listed in §201.2 of this **Ordinance** without first receiving approval from the **District;**

C. Issue **Watershed Management Permits** for **development** within **combined sewer areas** or **separate sewer areas** that are tributary to **combined sewers**;

D. Issue **variance**s; or

E. Hear appeals.

§ 1403. Procedure for Authorization

1. A **municipality** seeking to become an **authorized municipality** shall formally petition the **District** through a letter of intent. The letter of intent shall contain all of the following:

A. A statement of intent to adopt this **Ordinance** by reference;

B. A legal opinion indicating the **authorized municipality** has legal authority to perform all obligations required by this **Ordinance** including:

(1) The regulation of **erosion** and **sediment** control, **stormwater** management, **floodplains**, **isolated wetlands**, and **riparian environments**;

(2) The ability to conduct inspections;

(3) The issuance of **Watershed Management Permits**;

(4) The enforcement of this **Ordinance**; and

(5) The ability to enter into an intergovernmental agreement with the **District**;

C. A verified statement of financial capability to perform and adequately fund the obligations of the **authorized municipality**;

D. Designation of an **enforcement officer**;

E. An implementation plan; and

F. Proposed staffing.

2. An intergovernmental agreement between a **municipality** and the **District** shall effectuate the status of a **municipality** as an **authorized municipality**. The intergovernmental agreement shall remain effective unless terminated.

§ 1404. District Oversight of Authorized Municipalities

1. The **District** may inspect any **development** within an **authorized municipality**.

2. The **District** may audit an **authorized municipality** periodically. During an audit, the **District** may:

A. Inspect and copy pertinent records kept by an **authorized municipality**;

B. Inspect **Watershed Management Permits** issued by an **authorized municipality**;

C. Meet with staff of an **authorized municipality**;

D. Conduct field inspections of **developments** permitted by an **authorized municipality**;

E. Request and copy financial records of the **authorized municipality**;

F. Verify that an **authorized municipality** complies with all requirements listed in §1402.2 of this **Ordinance**; and

G. Verify that an **authorized municipality** does not violate any provision listed in §1402.3 of this **Ordinance**.

3. The **Director of Engineering** shall promptly notify an **authorized municipality** of any of the following deficiencies:

   A. Failure to comply with any provision of §1402.2 of this **Ordinance**;

   B. Violation of any provision of §1402.3 of this **Ordinance**; or

   C. Breach of the intergovernmental agreement;

4. An **authorized municipality** shall remedy any deficiency listed in §1404.3 of this **Ordinance** within thirty (30) calendar days of notice of the deficiency. In cases where a deficiency cannot be remedied within thirty days, the **Director of Engineering** may grant an extension.

5. The **Director of Engineering** may either suspend or terminate a **municipality**'s status as an **authorized municipality** if the **municipality** fails to remedy a violation in accordance with §1404.4 of this **Ordinance**. If a **municipality**'s status as an **authorized municipality** is either suspended or terminated, the **municipality** may petition the **Director of Engineering** for reauthorization after all deficiencies are remedied.

§ 1405. Representative Capacity

1. Any action to enforce any provision of this **Ordinance** by an elected official, officer, agent, or employee of the **District** shall be taken in the name of and on behalf of the **District** and said elected official, officer, agent, or employee shall not be rendered personally liable.

2. Any action to enforce any provision of this **Ordinance** by an elected official, officer, agent, or employee of an **authorized municipality** shall be taken in the name of and on behalf of the **authorized municipality** and said elected official, officer, agent, or employee shall not be rendered personally liable.

3. Any action to enforce any provision of this **Ordinance** by an **authorized municipality** shall be taken in the name of and on behalf of the **authorized municipality** and not in the name of and on behalf of the **District**.

This Ordinance as amended shall be in full force and effect April 4, 2019.

Adopted:

_____
Kari K. Steele
President of the Board of Commissioners of the
Metropolitan Water Reclamation District of
Greater Chicago

Approved as to form and legality:

_____
Ellen Avery
Head Assistant Attorney

_____
Susan T. Morakalis
General Counsel

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APPENDIX A. DEFINITIONS

Interpretation of Terms and Words

The terms and words used in this **Ordinance** shall be interpreted as follows:

1. Verbs and phrases in the present tense shall be presumed to include the future tense;

2. Parts of speech used in the singular shall be presumed to include the plural, and those used in plural shall be presumed to include the singular;

3. The words "shall," "will," and "must" are understood as mandatory, not permissive; and

4. All distances shall be measured horizontally unless otherwise stated.

5. A masculine, feminine or neuter pronoun shall not exclude the other genders.

Definitions

Words and terms not defined herein shall be understood by their common dictionary definition.

Within the context of this **Ordinance**, the following words and terms shall be defined as follows (except where otherwise specifically indicated):

100-Year Flood Elevation

The 100-year flood elevation is highest elevation of the **BFE** or a project-specific 100-year flood elevation.

Accessory Structure

A detached, non-habitable **building** without sanitary facilities that is an accessory to an existing **building** and that is less than 750 square feet in area. Accessory **structures** include, but are not limited, to garages and sheds.

Allowable Release Rate

The maximum or actual post-development release rate from a required **detention facility** as specified in §504.3 of this **Ordinance**, which is adjusted by existing **depressional storage** and/or **unrestricted flow** areas on the **site**.

Appellant

A **co-permittee** who appeals the **District**'s denial and/or imposition of conditions of a **Watershed Management Permit** or of a **variance** request.

Appropriate Use

The only types of **development** within the **regulatory floodway** that are eligible for a **Watershed Management Permit** as specified in §602.27 of this **Ordinance**.

Authorized Municipality

A **Cook County municipality** authorized by the **District** to issue **Watershed Management Permits** within its corporate boundaries.

Base Flood

The **flood** having a one percent probability of being equaled or exceeded in a given year. The **base flood** is also known as the "100-year flood."

Basement

Any area of a **building** having its floor below grade.

BB

Basement **B**ackup. Discharge of sanitary wastewater into the lower level of a building caused by either a blockage or collapse on the service lateral from the building to the public sewer system or by surcharging of the public sector sewer system.

BFE

Base **F**lood **E**levation. The height of the **base flood** in relation to the North American Vertical Datum of 1988 that is associated with the **Special Flood Hazard Area** on the effective **FIRM**. The **BFE** shall be determined by the effective Flood Insurance Study (**FIS**) for a **development site** at the time of application as determined by the criteria provided in §601.3 and §601.4 of this **Ordinance**.

Board of Commissioners

The nine-member Metropolitan Water Reclamation District of Greater Chicago's **Board of Commissioners** who are elected by the public.

BSC

Biological **S**tream **C**haracterization. A program developed by the Illinois Environmental Protection Agency (**IEPA**) in conjunction with biologists from the Illinois Department of Natural Resources (IDNR) to aid in the classification of streams throughout the **watersheds** of Illinois. The **BSC** utilizes the Alternative Index of Biotic Integrity (AIBI) to classify streams as A, B, C, D, or E. The ratings use fish, macroinvertebrates, crayfish, mussels, and threatened and endangered species information to generate an overall score of biological diversity and integrity in streams.

BSS

Biologically **S**ignificant **S**tream. Streams with a Biological Diversity or Integrity of "A", "B", or "C" according to the latest edition of the Illinois Department of Natural Resources (**NRCS**) Office of Resource Conservation: Biological Stream Ratings for Diversity, Integrity, and Significance.

Building

A **structure** that is constructed and is enclosed by walls and a roof, including **manufactured homes**. This term does not include **accessory structures**.

Building Envelope

The delineation between the interior and the exterior environments of a **building** and often depicted as the **building** foundation.

Bulletin 70

Huff, F.A., and J.R. Angel, 1989. "Rainfall Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois" (**Bulletin 70**), Illinois State Water Survey.

CCSMP

The **C**ook **C**ounty **S**tormwater **M**anagement **P**lan adopted by the Metropolitan Water Reclamation District of Greater Chicago **Board of Commissioners** on February 15, 2007, as amended from time to time.

CLOMA

Conditional **L**etter **o**f **M**ap **A**mendment. A **FEMA** comment letter on a **development** proposed to be located in, and affecting only that portion of, the area of **floodplain** outside the **regulatory floodway** and having no impact on the existing **regulatory floodway** or **BFEs**.

CLOMR

Conditional **L**etter **o**f **M**ap **R**evision. A letter that indicates that **FEMA** will revise **BFEs**, **flood** insurance rate zones, **flood** boundaries, or **floodways** as shown on an effective **FIRM** after the **record drawings** are submitted and approved.

Co-Permittee

A **person** applying for a **Watershed Management Permit**, who must be the **owner** of the land specified in the application, the **owner**'s representative, or a developer with the owner's authorization. In the event, the **co-permittee** is a beneficiary of a land trust that owns the land specified in the application, the **co-permittee** must have power of direction. [*Compare* **co-permittee** *with* **permittee** and **sole permittee**].

Combined Sewer

Sewers intended for the combined conveyance of **stormwater runoff** and wastewater flows. [*Compare* **combined sewer** *with* **sanitary sewer** and **storm sewer**].

Combined Sewer Area

Areas within the **District**'s corporate boundaries that have sewers intended for the combined conveyance of **stormwater runoff** and wastewater flows to a **District** wastewater storage or treatment facility. This regulatory limit should be considered the high water mark **of combined sewer area** service limits, and was established in the past to limit further expansion of areas served by **combined sewers**. This area does not represent the actual effective boundaries between combined and separate sewer sheds. Consult local sewer system atlas information for that level of detail. [*Compare* **combined sewer area** *with* **separate sewer *area***].

Compensatory Storage

An excavated volume of storage used to offset the loss of existing flood storage capacity when fill or **structures** are placed within the **floodplain**.

Compliance Report and Schedule

A report that specifies a schedule and final compliance date for which all violations and conditions contained in a **NON – Stormwater** and/or a **NONC** are remedied.

Connection Impact Fee

Fee for annexing to the **District**.

Contiguous

Adjacent to and touching at one point or more; if the lands are separated by an easement or a dedicated right-of-way, it shall be considered contiguous.

Cook County

Cook County is defined as the land area within the boundaries of Cook County, Illinois.

Corps

United States Army Corps of Engineers.

Corps Jurisdictional Determination

Procedure by which the **Corps** determines whether it has jurisdiction over a subject water as a waters of the United States. The purpose of a jurisdictional determination is to determine whether a wetland is a **Corps** jurisdictional wetland. For the purposes of this **Ordinance**, a wetland not under the jurisdiction of the **Corps** shall be considered an **isolated wetland**.

Corps Jurisdictional Wetlands

All **wetlands** that are under the jurisdiction of the **Corps**.

Corps Wetland Delineation Manual

The current Corps Wetland Delineation Manual, including any relevant regional supplements, or superseded and as authorized under Section 404 of the Clean Water Act.

Critical Duration Analysis

Study that determines which **storm event** duration results in the greatest peak **runoff** rate.

Dam

Any obstruction, wall embankment, or barrier, including the related abutments and appurtenant works, that is constructed to store, direct, or impound water. An underground water storage tank is not classified as a **dam**.

Demolition

Removal of **structures**, **impervious area**, or utilities that return a **parcel** to a natural or vacant state. **Demolition** must not affect the volume, flow rate, drainage pattern, or composition of **stormwater**. **Demolition** activities that change the use of the **site** or require any fill within a **flood protection area** are considered **development**. [*Compare* **demolition** *with* **maintenance***,* **maintenance activities***, and* **development**.]

Depressional Storage

The volume potentially contained below a closed contour on a one-foot contour topographic map, with the upper elevation determined by the invert of a surface-gravity outlet.

Design Runoff Rate

The **runoff** rate, or flow rates, used to design **major stormwater systems** and determine offsite flow rates. **Design runoff rates** are calculated by using event hydrograph methods.

Detention Facility

A manmade **structure** providing temporary storage of **stormwater runoff** from a **development** with a release rate specified by this **Ordinance**. The **Detention Facility** includes a stormwater storage basin, control structure (or restrictor), and the basin outlet, overflow and inflow pipes.

Development

Any human-induced activity or change to real estate (including, but not limited to, grading, paving, excavation, dredging, fill, or mining; alteration, subdivision, change in land use or practice; **building**; or storage of equipment or materials) undertaken by private or public entities that affects the volume, flow rate, drainage pattern or composition of **stormwater**, or the **substantial improvement** of an existing **building** in a **Special Flood Hazard Area**. The term **development** shall include **redevelopment** and shall be understood to not include **maintenance, maintenance activities**, or **demolition**. [*Compare* **development** *with* **maintenance***,* **maintenance activities***, and* **demolition**.]

Director of Engineering

The Director of Engineering of the Metropolitan Water Reclamation District of Greater Chicago, and his or her designee.

District

Metropolitan Water Reclamation **District** of Greater Chicago. A special-purpose district established by the State of Illinois to, among other things, manage wastewater for an area largely corresponding to **Cook County**, and **stormwater** in **Cook County**. The **District** is an independent unit of local government with an elected nine member **Board of Commissioners**.

Disturbed Area

Actual land surface area disrupted by construction activity.

Drainage Area

The land area tributary to a given point that contributes **runoff** from rainfall and/or snowmelt.

DWP

Detailed **W**atershed **P**lans. A study and evaluation by the **District** to assess the specific conditions and needs for each of the following **watersheds**: Calumet-Sag Channel, the Little Calumet River, the Lower Des Plaines River, the North Branch Chicago River, Poplar Creek, and the Upper Salt Creek.

Elevation Certificates

A form published by **FEMA** that is used to certify the **BFE** and the lowest elevation of a **building**'s **lowest floor**.

Enforcement Officer

A municipal official having actual authority from an **authorized municipality** to administer this **Ordinance** and issue **Watershed Management Permits**.

Erosion

The process of soil particle detachment from the land surface by the forces of wind, water, or gravity.

Erosion and Sediment Control Practice

A temporary or permanent measure that stabilizes soil by covering and/or binding soil particles in order to prevent soil particles from becoming detached by the forces of wind, water, or gravity and intercepts **sediment** in **runoff**.

Erosion Control Practice

A temporary or permanent measure that stabilizes soil by covering and/or binding soil particles in order to prevent soil particles from becoming detached by the forces of wind, water, or gravity.

Executive Director

The **Executive Director** of the Metropolitan Water Reclamation District of Greater Chicago.

Existing Detention Facility

A **detention facility** either permitted under the **Sewer Permit Ordinance** or constructed as of the effective date of this **Ordinance**.

Existing Development Plans List

A list of proposed **development** projects submitted by a **municipality** to the **District** for which the **municipality** has granted formal preliminary approval.

Existing Manufactured Home Park or Subdivision

A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the **manufactured homes** are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final **site** grading or the pouring of concrete pads) is completed before the effective date of this **Ordinance**.

Expansion to an Existing Manufactured Home Park or Subdivision

The preparation of additional **sites** by the construction of facilities for servicing the lots on which the **manufactured homes** are to be affixed (including the installation of utilities, the construction of streets, and either final **site** grading or the pouring of concrete pads).

Facility Connection Authorization

Within the City of Chicago, an authorization for planned connection to **District** owned, operated, and maintained facilities located within the City of Chicago, and for impacts to **District** owned or leased property. Examples of **District** owned facilities may include (but are not limited to): **District** interceptor, **TARP** structure or **District** tunnel, **District** Lift Station or force main, **District** reservoir, a new or reconstructed outfall to a Chicago Area Waterway within the City of Chicago, new or reconstructed outfall to Lake Michigan from property located within the City of Chicago. Formerly known as a Sewer Connection Authorization. Refer to §703 of this **Ordinance** for more information.

Farmed Wetland

A **wetland** that is farmed currently or has been farmed within five years previous to the permit application date.

FEMA

Federal **E**mergency **M**anagement **A**gency. The federal agency whose primary mission is to reduce the loss of life and property and protect the nation from all hazards (including natural disasters, acts of terrorism, and other man-made disasters) by leading and supporting the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

FIRM

Flood **I**nsurance **R**ate **M**ap. The current version of a map issued by **FEMA** that is an official community map on which **FEMA** has delineated both the special hazard areas and the risk premium zones applicable to a community together with any amendments, additions, revisions, or substitutions issued by **FEMA** at any time.

FIS

Flood **I**nsurance **S**tudy. The current version of a study of **flood** discharges and **flood** profiles for a community adopted and published by **FEMA**, together with any amendments, additions, revisions or substitutions issued by **FEMA** at any time. The **FIS** also includes its associated **FIRMs**.

Flood or Flooding

A general and temporary condition of partial or complete inundation of normally dry land areas from the unusual and rapid accumulation or **runoff** of surface waters from any source.

Flood Control Project

1) A **development** undertaken by either the **District** or a **municipality** to reduce the frequency and magnitude of **flood** events, including, but not limited to, reservoirs, floodwalls, levees, and channel conveyance improvements and excluding **detention facilities** or 2) a **development** undertaken by a public utility, as defined in the Illinois Public Utilities Act, that the **District** determines is necessary to protect critical utility infrastructure from **flood** events and that the **District** determines is consistent with the purposes of this **Ordinance**, as set forth in §103.

Flood Protection Areas

Regulatory floodplains, **regulatory floodways**, **riparian environments**, **wetlands**, and **wetland buffers**.

Floodplain

The area adjacent to and including a body of water where ground surface elevations are at or below a specified **flood** elevation.

Floodproof or Floodproofing

Additions, changes, or adjustments to **structures** or land that prevent the entry of **flood** water in order to protect property from **flood** damage.

Floodway

The channel and portion of the floodplain adjacent to a stream or watercourse that is needed to convey the base flood without cumulatively increasing the water surface elevation more than a tenth of a foot.

Floodway Conveyance

The measure of the flow carrying capacity of the **floodway** and is defined using Manning's equation as, $K = (1.49/n)AR^{2/3}$ where "n" is Manning's roughness factor, "A" is the effective area of the cross-section, and "R" is ratio of the wetted area to the wetted perimeter.

Flow-Through Practices

Permanent **volume control practices** designed to treat **stormwater runoff** from **impervious areas** of a **development** after permanent **stabilization** is achieved.

FPE

Flood **P**rotection **E**levation. The highest **100-year flood elevation** plus two foot of freeboard, as determined in §601.9 of this **Ordinance**.

General Counsel

The General Counsel of the Metropolitan Water Reclamation District of Greater Chicago.

Green Infrastructure

Practices aimed to mimic functions of the hydrologic cycle including infiltration, interception, depression storage, evapotranspiration, and evaporation.

Groundwater

Subsurface water occupying the saturation zone, from which wells and springs are fed. Water found below the normal water table.

High Quality Isolated Wetland

Isolated wetlands that are of the highest value due to their uniqueness, scarcity, function, and/or value as determined by §603.9 of this **Ordinance**.

Highest Adjacent Grade

The highest natural elevation of the ground surface next to the proposed walls of a **building** prior to construction.

Hydraulically Equivalent Compensatory Storage

Compensatory storage that can be shown by hydrologic and hydraulic analysis to off-set the increase in **flood** elevations due to **development**.

Hydrology

The science of the behavior of water including its dynamics, composition, and distribution in the atmosphere, on the surface of the earth, and underground.

IDOT

Illinois **D**epartment **o**f **T**ransportation.

IEPA

Illinois **E**nvironmental **P**rotection **A**gency.

Illinois Pollution Control Board

A quasi-legislative and quasi-judicial body created under the Illinois Environmental Protection Act. The Illinois Pollution Control Board adopts environmental regulations and hears contested cases.

Illinois Recommended Standards for Sewage Works

The Illinois Recommended Standards for Sewage Works as included in the Illinois Administrative Code. 35 Ill. Adm. Code 370.

Illinois Urban Manual

This manual contains design guidance for a **development site** to meet this **Ordinance**'s performance standards for **erosion** and **sediment** control.

Impervious Area

Surfaces that do not readily allow for the penetration of rain into the ground, and include but are not limited to rooftops, paved areas and graveled areas. Areas that are designed to promote the infiltration of rainfall into the ground at rates at or above the infiltration rate of naturally vegetated areas (given applicable soil types), such as non-compacted gravel areas, porous/permeable pavement areas, and bioretention areas (rain gardens and bioswales, composed of an engineered soil mix) shall not be considered impervious.

Indirect Wetland Impact

A **development** activity that causes the **wetland hydrology** to fall below eighty percent (80%), or exceed one-hundred fifty percent (150%), of the existing condition **storm event runoff** volume to the **wetland** for the 2-year, 24-hour **storm event**.

Industrial Waste

The solids, liquid, or gaseous wastes resulting from any industrial, manufacturing, trade or business process or from the **development**, recovery or processing of natural resources.

Interest

The property interest or contractual interest, legal or equitable, directly or indirectly, in part or in full, and includes options to buy. In the case of a shareholder interest, the shareholder shall be deemed to have an interest if he owns or controls 5% or more of the shares.

Isolated Waters

All waters including **lakes**, ponds, streams, intermittent streams, and ephemeral pools that are not under the **Corps** jurisdiction. The limits of the **Isolated Waters** in **Cook County** extend to the **OHWM**.

Isolated Wetland

All **wetlands** that are not under the jurisdiction of the **Corps**.

Isolated Wetland Buffer

The vegetated area adjacent to **isolated wetlands** left open for the purpose of eliminating or minimizing adverse impacts to such areas.

Isolated Wetland Submittal

Submittal required under §305 of this **Ordinance**.

Jurisdictional Waters of the U.S.

All waters including **lakes**, ponds, streams, intermittent streams, and ephemeral pools that are under the jurisdiction of the **Corps**.

Jurisdictional Wetlands

All **wetlands** that are under the jurisdiction of the **Corps**.

Lake

A natural or artificial body of water encompassing a surface area of two or more acres that retains water throughout the year.

LOMA

Letter **o**f **M**ap **A**mendment. The official determination by **FEMA** that a specific **structure** or **parcel** of land is not in a **regulatory floodplain**. A **LOMA** amends the effective **FIRM**.

LOMC

Letter **O**f **M**ap **C**hange. A letter from **FEMA** which reflects an official revision to an effective **NFIP** map. **LOMC**s are issued in place of the physical revision and republication of the effective map.

LOMR

Letter **O**f **M**ap **R**evision. A letter from **FEMA** that revises **BFEs**, **flood** insurance rate zones, **flood** boundaries, or **floodway** as shown on an effective **FIRM**.

LOMR-F

Letter **O**f **M**ap **R**evision Based on **F**ill. A letter from **FEMA** which officially revises an effective **NFIP** map. A **LOMR-F** provides **FEMA**'s determination concerning whether a **structure** or **parcel** has been elevated on fill above the **BFE** and excluded from the **Special Flood Hazard Area**.

Long Term O&M Program

Long **T**erm **O**peration and **M**aintenance **P**rogram. An ongoing program that a **satellite entity** develops and implements to reduce **SSOs** and **BB**s including but not limited to removing I/I sources, addressing deficiencies in its sewer system, maintaining system capacity, and preventing catastrophic system failures.

Lowest Entry Elevation

The elevation at which water can enter a **building** through any non-water tight opening such as a doorway threshold, windowsill, or **basement** window well.

Lowest Floor

The **lowest floor** of the lowest enclosed area (including **basement**). An unfinished or **flood** resistant enclosure, used solely for parking of vehicles, **building** access, or storage in an area other than a **basement** area is not considered a **building**'s **lowest floor**; provided, that such enclosure is not built so as to render the **structure** in violation of the applicable non-elevation design requirement of the Code of Federal Regulations (44 CFR 60.3).

Maintenance

The action required to preserve the original function and prevent failure of systems, which include but are not limited to, **sewage** systems, **major stormwater systems**, constructed **wetlands**, or **green infrastructure**. [*Compare* **maintenance** *with* **maintenance activities**, **development***, and* **demolition**.]

Maintenance Activities

In kind replacement, restoration, or repair of existing infrastructure, pavement, or facilities including, but not limited to, roadways and parking lots such that they will perform the same functions for which they were originally designed and constructed. [*Compare* **maintenance activities** *with* **maintenance**, **development***, and* **demolition**.]

Major Stormwater System

That portion of a stormwater system needed to store and convey flows for the 100-year storm event.

Manual of Procedures

The **District**'s Manual of Procedures for the Administration of the Sewer Permit Ordinance as amended November 5, 1988.

Manufactured Home

A **building** that is transportable in one or more sections, built on a permanent chassis, and designated for use with or without a permanent foundation when connected to the required utilities. The term **manufactured home** includes park trailers, travel trailers, and other similar vehicles placed on a **site** for more than 180 consecutive days.

Manufactured Home Park or Subdivision

A **parcel** or **contiguous parcels** of land divided into two or more **manufactured home** lots.

Material Change

Any deviation from the approved plans or specifications accompanying an application for which a **Watershed Management Permit** has been issued under this **Ordinance**, that would affect the **runoff**, capacity, flow, or operation of sewerage and/or **major stormwater systems** constructed under said **Watershed Management Permit**.

Minor Stormwater System

All infrastructure including curb, gutter, culverts, roadside ditches and swales, **storm sewers**, tiles, subsurface drainage systems, and other practices intended to convey or capture **stormwater runoff** from **storm events** less than a 100-year **storm event**.

Multi-County Municipality

A **municipality** containing corporate area within both **Cook County** and an Illinois county located **contiguously** adjacent to **Cook County**.

Multi-Family Residential

Residential **parcel** where any **building** contains three (3) dwelling units or more. [*Compare* **multi-family residential** *with* **residential subdivision**.]

Municipality

A local government, including a city, village, town, or Cook County. The term shall not be understood to include a township, school district, park district, or sanitary district.

Native Planting Conservation Area

Area planted with native deep-rooted vegetation, as approved by the **District**, and maintained in perpetuity to address **unrestricted flow** areas of a **development site**.

New Construction

For the purpose of determining insurance rates, **structures** for which the **start of construction** commenced on or after the effective date of an initial **FIRM** or after December 31, 1974, whichever is later, and included any subsequent improvements to such **structures**. For the purpose of **floodplain** management, **new construction** means **structures** for which the **start of construction** commenced on or after the effective date of the **floodplain** management regulation adopted by a community and includes any subsequent improvements to such **structures**.

New Impervious Area

Impervious areas that result from **development** or **redevelopment** including new **structures** or **buildings** associated with **development**, new impervious surfaces, and impervious surfaces that are being replaced as part of **redevelopment**.

New Manufactured Home Park or Subdivision

A **manufactured home park** or subdivision for which the construction of facilities for servicing homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final **site** grading or the pouring of concrete pads) is completed on or after the effective date of this **Ordinance**.

NFIP

National **F**lood **I**nsurance **P**rogram. The requirements of the **NFIP** are codified in Title 44 of the Code of Federal Regulations.

NONC

Notice **o**f **N**on-**C**ompliance**.** Notice issued to a **satellite entity** by the **District** for an apparent infraction of the Infiltration/Inflow Control Program described in Article 8 of this **Ordinance**.

Non-Residential

Land uses other than **residential subdivisions**, **multi-family residential**, **right-of-way**, or **open space**. **Non-residential** land use may include, but is not limited to, commercial land use and industrial land use.

Non-Qualified Development

Redevelopment area excluded from the **allowable release rate** calculation specified in §504.3 and **detention facility** volume calculation specified in §504.7 of this **Ordinance**.

Non-Qualified Sewer Construction

Non-qualifying sewer construction is defined in §701.2 of this **Ordinance**.

NOV

Notice **o**f **V**iolation. Notice given to a **permittee**, **co-permittee**, and/or any other **person** responsible for an apparent violation of this **Ordinance**.

NPDES

The **N**ational **P**ollutant **D**ischarge **E**limination **S**ystem.

NRCS

The United States Department of Agriculture **N**atural **R**esources **C**onservation **S**ervice.

NWI

National **W**etland **I**nventory. The **wetland** mapping program created by the U.S. Fish and Wildlife Service to provide information on the characteristics, extent, and status of the nation's **wetlands**, deepwater habitats, and other wildlife habitats.

Offsite Detention Facility

A manmade **structure** providing temporary storage of **stormwater runoff** intended to mitigate hydrologic impacts of **development** elsewhere in the **watershed**.

Offsite Volume Control Practices

Permanent practices designed to capture, retain, and infiltrate **stormwater runoff** from **impervious areas** of a **development** located elsewhere in the **subwatershed**.

OHWM

Ordinary **H**igh **W**ater **M**ark. The point on a bank or shore at which the presence and movement of surface waters is continuous, leaving a distinctive mark. The mark may be caused by **erosion**, destruction or prevention of terrestrial vegetation, a predominance of hydrophytic vegetation, or other recognized factors.

Open Space

Pervious land to be retained as pervious land which is not part of a larger **development. Open space** may include sidewalk, bike path, nature or walking trail **development** less than or equal to fourteen feet in width. [*Compare* **open space** *with* **right-of-way**.]

Ordinance

The Watershed Management Ordinance.

Other Wastes

All decayed wood, sawdust, shavings, bark, lime, refuse, ashes, garbage, offal, oil, tar, chemicals, and all other substances except **sewage** and **industrial wastes**.

Outfall

The end point of any **storm**, **sanitary**, or **combined sewer**, providing a point source discharge into a defined **waterway**, or Lake Michigan. **Outfalls** do not include culverts or open conveyances systems connecting two segments of a **waterway**. Outfalls do not include private single-family home drains.

Owner

The record title holder or a beneficiary of a land trust which is the record title holder, and includes singular and plural; if the owner is other than an individual, the term includes beneficiaries, agents, shareholders, officers, and directors.

Ownership

The holding of record title or any beneficial **interest**.

OWR

The Illinois Department of Natural Resources **O**ffice of **W**ater **R**esources.

Parcel

Contiguous land area under single **ownership** or control, under an affidavit of **ownership**, or under a single legal description on record with the Cook County Recorder of Deeds Office.

Permittee

Any **municipality**, municipal corporation, sanitary district, utility company, township government, or any other governmental body required to jointly sign a **Watershed Management Permit** application. [*Compare* **permittee** *with* **co-permittee** and **sole permittee**].

Person

Any individual, partnership, firm, school, district, company, corporation, municipal corporation, association, joint stock company, trust, estate, unit of local government, sanitary district, special taxing district, school district, public utility, political subdivision, county agency, state agency, federal agency, or any other legal entity, or **owner**, or any legal representative, agent, or assign thereof.

Professional Engineer

A **person** licensed under the laws of the State of Illinois to practice professional engineering.

Professional Engineering

The application of science to the design of engineering systems and facilities using the knowledge, skills, ability, and professional judgment developed through professional engineering education, training, and experience.

Professional Land Surveyor

A **person** licensed under the laws of the State of Illinois to practice land surveying.

PSP

Private **S**ector **P**rogram. An ongoing program that a **satellite entity** develops and implements to identify and remove I/I from privately owned sources.

Public Flood Easement

An easement acceptable to the appropriate jurisdictional body that meets the regulation of the **OWR**, the **District**, and the **municipality**, that provides legal assurances that all areas subject to **flooding** in the created backwater of the **development** will remain open to allow **flooding**.

Qualified Sewer Construction

All public and private new sewers and new sewer connections, exterior to a **building envelope**, including sewer repair and sewer replacement. See §701 of this **Ordinance** for a complete list.

Recommended Standards for Wastewater Facilities

The current edition of the **Recommended Standards for Wastewater Facilities,** also known as the Ten States Standards, as published by the Great Lakes—Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.

Record Drawings

Drawings prepared, signed, and sealed by a **professional engineer** or **professional land surveyor** representing the final "as-built" record of the actual in-place elevations, location of **structures**, and topography.

Redevelopment

Any human-induced activity or change to an existing developed property (including but not limited to, grading, paving, excavation, dredging, fill, or mining; alteration, subdivision, change in land use or practice; **building**; or storage of equipment or materials) undertaken by private or public entities that affects the volume, flow rate, drainage pattern, or composition of the **site stormwater runoff** on the previously developed land. The term shall not be understood to include **maintenance**.

Regulatory Floodplain

The **floodplain** as determined by the **BFE** used as the basis for regulation in this **Ordinance**.

Regulatory Floodway

Floodway under the jurisdiction of the Illinois Department of Natural Resources (17 Ill. Adm. Code 1700.30), which consists of portions of the **floodplain** depicted as **floodway** on maps recognized by **OWR**.

Residential Subdivision

Residential **parcel** that is planned to be subdivided for **development**, and where each sub-parcel contains a **building** with less than three (3) dwelling units. [*Compare* **residential subdivision** *with* **multi-family residential** and **single-family home**].

Respondent

Permittee, **co-permittee**, and/or any other **person** responsible for an apparent violation of this **Ordinance**.

Retention-Based Practices

Permanent **volume control practices** designed to capture, retain, infiltrate and treat **stormwater runoff** from **impervious areas** of a **development** after permanent **stabilization** is achieved.

Right-of-Way

Public **right-of-way** dedicated as of the effective date of this **Ordinance** including features such as roads and sidewalks. [*Compare* **right-of-way** *with* **open space**.]

Riparian Environment

The vegetated area between aquatic and **upland** ecosystems adjacent to a **waterway** or body of water that provides **flood** management, habitat, and water quality enhancement or other amenities dependent upon the proximity to water.

Runoff

The water from melting snow and/or precipitation falling within a **watershed** drainage area that exceeds the infiltration capacity of the soil of that basin.

Sanitary Sewer

Sewers intended for the conveyance of wastewater. [*Compare* **sanitary sewer** *with* **storm sewer** and **combined sewer**].

Satellite Entity

Any municipality, municipal corporation, township government or other governmental body, sanitary district, or utility company that owns and/or operates a public sanitary sewer system, including any successors or assigns of those entities, that discharges directly and/or indirectly to the **District's** facilities.

Sediment

The suspended soil particles that are transported after **erosion** has occurred.

Sedimentation

The process when the velocity of wind or water is slowed sufficiently to allow the suspended soil particles to settle.

Sediment Basin

A **structure** or area that allows for the **sedimentation** of **stormwater runoff**.

Sediment Control Practice

A **structure** that is designed to intercept **sediment** in **runoff**.

Separate Sewer Area

An area where **stormwater runoff** is intended to be collected and conveyed in a **separate sewer**, pipe and/or ditch system to a point of discharge in a receiving natural or man-made **waterway** or other **stormwater facility**. This regulatory limit was established in the past to limit further expansion of areas served by **combined sewers**. This area does not represent the actual effective boundaries between combined and separate sewer sheds. Consult local sewer system atlas information for that level of detail. [*Compare* **separate sewer area** *with* **combined sewer *area***].

Service Sewer

A sewer pipe constructed on private property, except for street crossing, that receives flow from a single **building** and connects to a sewer main or lateral.

Sewage

The water-carried human wastes or a combination of water-carried waters from residences, business **buildings**, institutions and industrial establishments, together with such ground, surface, storm or **other wastes** as may be present.

Sewage and Waste Control Ordinance

The **District's** current **Sewage and Waste Control Ordinance**.

Sewer Permit Ordinance

The **District's Sewer Permit Ordinance** as amended in July of 1999.

Sewerage System Permit

A permit required under the **Distric**t's **Sewer Permit Ordinance.**

Silt Fence

A temporary **sediment** control barrier consisting of entrenched geotextile filtering fabric attached to supporting posts that is designed to prevent **sediment**-laden **runoff** from leaving a **site**. The application of a **silt fence** is limited to containment of sheet flow **runoff** from small **drainage areas**.

Single-Family Home

Residential **parcel** containing less than three (3) dwelling units. **Single-family home parcels** subdivided after the effective date of this **Ordinance** are considered as **residential subdivision**. [*Compare* **single family home** *with* **residential subdivision** and **multi-family residential**].

Site

Parcel or **parcels** associated with a **development** or **redevelopment**.

Site Constraint

Condition on a **site** that limits the use of **retention-based practices,** such as contaminated soils, high **groundwater**, **wetlands**, **riparian environments**, or **floodway**. New **development** that is considered a **site constraint** includes, but is not limited to, gas stations, chemical storage facilities, and conservation areas. Poor soils and proposed utility conflicts are not considered **site constraints**.

Sole Permittee

A **co-permittee** applying for a **Watershed Management Permit** without a **permittee**. A **sole permittee** is solely and completely responsible for the perpetual operation and **maintenance** of all site infrastructure, including the **sanitary sewer systems,** as approved under the **Watershed Management Permit**. See §301.1.B(1) of this **Ordinance** for a complete list requirements. [*Compare* **sole permittee** *with* **permittee** and **co-permittee**].

Special Flood Hazard Area

An area having special **flood**, mudslide, mudflow, or flood-related **erosion** hazards and which is identified on a **FIRM** as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

SSA

Sewer **S**ummit **A**greement provides guidelines for achieving final compliance with sewer rehabilitation requirements acceptable to **IEPA**, **USEPA**, municipal conferences and the **District**. The goals of the **SSA** are to prevent water pollution and eliminate **BBs** and adverse surcharging conditions that cause health hazards and financial losses**.**

SSO

Sanitary Sewer Overflow. Any release or diversion of untreated sanitary wastewater from the sanitary sewer system to a surface water, storm sewer or storm ditch or the ground due to circumstances including but not limited to rain, snow melt, power outage, collapsed sewers, equipment failure, widespread flooding and/or pumping

Stabilization or **Stabilized**

Establishment of vegetative cover, riprap, or other means that minimizes **erosion** on **disturbed areas**.

Standard Isolated Wetland

All **isolated wetlands** other than **high quality isolated wetlands**.

Standard Specifications for Water & Sewer Construction in Illinois

The current edition of the Standard Specifications for Water & Sewer Construction in Illinois published by the Illinois Society of Professional Engineers.

Start of Construction

The date the **building** or **development** permit was issued, provided the actual **start of construction**, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a **structure** on a **site**, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a **manufactured home** on a foundation. For **substantial improvements**, the actual **start of construction** means the first alteration of any wall, ceiling, floor, or other structural part of a **building** whether or not that alteration affects the external dimensions of the **building**.

Storm Event

The frequency rainfall event as published in **Bulletin 70**.

Storm Sewer

A sewer intended for the conveyance of only **stormwater runoff**. [*Compare* **storm sewer** *with* **combined sewer** and **sanitary sewer**].

Stormwater

Precipitation that falls to the ground that does not naturally infiltrate into the subsurface soil.

Stormwater Facility

Structures and measures both natural and artificial which serve as a means of draining surface and subsurface water from land including, but not limited to, ditches, channels, conduits, bridges, culverts, levees, ponds, natural and man-made impoundments, **wetlands**, **wetland buffers**, **riparian environment**, tile, swales, **storm sewers**, and **waterways**.

Structure

A **structure** is anything that is erected or constructed on or below ground including, but not limited to, **buildings**, **manufactured homes**, **accessory structures**, fences, sheds, tanks, **dams**, sewers, manholes, drop shafts, constructed channels, **outfalls**, parking lots, driveways, roads, sidewalks, and concrete patios.

Substantial Damage

Damage of any origin sustained by a **building** whereby the cost of restoring the **building** to its before damaged condition would equal or exceed 50 percent of the market value of the **building** before the damage occurred.

Substantial Improvement

Determined by the local **municipality** in accordance with **NFIP** regulation. **FEMA** defines substantial improvement as "Any repair, reconstruction, rehabilitation, addition, or other improvement of a **building**, the cost of which improvement equals or exceeds, individually or in the aggregate, fifty percent (50%) of the fair market value of the **building**, determined from the equalized assessed value of the **building** before the **start of construction** of the improvement. This term includes **building**s which have incurred "**substantial damage**", regardless of the actual repair work performed." The term "cost of improvement" includes the market value of volunteer labor and donated materials. The term "cost of improvement" does not, however, include either (a) any project for improvement of a **building** to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions or (b) any alteration of a historic **building** or a historic district that will not preclude the **building**'s continued designation as a historic **building**.

Subwatershed

Major **watershed** division of a **watershed planning area** as identified in the **District**'s Detailed Watershed Plans.

Swink and Wilhelm Mean Coefficient of Conservatism (ĉ)

The mean coefficient of conservatism (ĉ) in an inventory group calculated by the sum of all coefficients in an inventory unit divided by the number of species (N).

Swink and Wilhelm Floristic Quality Index (FQI)

The index derived from floristic inventory data. The index is the arithmetic product of the average coefficient of conservatism (ĉ) and the square-root of species richness (√N) of an inventory unit.

TARP

The **District**'s **T**unnel **A**nd **R**eservoir **P**lan including all associated **structures** and appurtenances.

TGM

Technical **G**uidance **M**anual. A manual prepared in conjunction with this **Ordinance** that provides technical information and guidance on how to comply with the provisions of this **Ordinance**, and as amended from time to time.

Tributary Area

All land drained by or contributing water to the same stream, **lake**, or **stormwater facility**, or which drains to a common point.

Underdrain

A below grade pipe containing openings that allow the drainage of **stormwater** from overlying soils, gravel, sand, aggregate, and other similar media. **Underdrains** include, but are not limited to, field tiles, drain tiles, and open jointed pipes.

Unrestricted Flow

Stormwater runoff from a **development** which is not directed to the required **detention facility** is unrestricted or uncontrolled release or flow. The areas generating unrestricted flow are referred to as unrestricted or uncontrolled release rate areas.

Upland

Terrain lying above the level where water flows or where **flooding** occurs.

Upstream Tributary Flow

Stormwater runoff or **groundwater** flows from **tributary areas** upstream of a **development site**. **Upstream tributary flows** can be **bypass flows**.

USEPA

United States Environmental Protection Agency

Variance

A limited grant of relief by the **District** from the term(s) or condition(s) of this **Ordinance**.

Volume Control Practices

Permanent practices designed to capture, retain, and infiltrate **stormwater runoff** from **impervious areas** of a **development** after permanent **stabilization** is achieved.

Volume Control Storage

The first inch of **runoff** from the **impervious area** of **development** on the **site**.

Watershed

Tributary areas discharging to a common point.

Watershed Management Permit

A permit established by this **Ordinance** that is issued by the **District** prior to the approval of a **building** or construction permit by the appropriate unit of local government. The issuance of a **Watershed Management Permit** signifies that the proposed **development** is in compliance with the provisions of this **Ordinance**.

Watershed Planning Area

The area considered in a specific **DWP** and depicted in Appendix E of this **Ordinance**.

Water Reclamation Facility

Facility designed to treat **sewage**.

Water Resource Benefit

A decrease in **flood** elevations, a reduction in **flood** damages to **structures** upstream or downstream of the **development site**, a reduction in peak flow rates, and/or enhancement of existing water-related environmental resources created by the **development** which is greater than the minimum **Ordinance** requirements.

Waterway

Navigable body of water such as a stream, creek, canal, channel, or river.

Wetlands

Areas which are inundated or saturated by surface or ground water (**hydrology**) at a frequency and duration sufficient to support, under normal circumstances, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). **Wetlands** generally include swamps, marshes, bogs, and similar areas.

Wetland Buffer

The vegetated area adjacent to **wetlands** left open for the purpose of eliminating or minimizing adverse impacts to such areas.

Wetland Impact

Wetlands that are directly or indirectly disturbed or otherwise adversely affected, whether temporarily or permanently, by filling, excavation, **flooding**, or drainage which results from implementation of a **development** activity.

Wetland Mitigation

The process of offsetting **wetland impacts** through the restoration, creation, enhancement, and preservation of **wetlands**.

Wetland Mitigation Bank

A **site** where **wetlands** are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for authorized impacts. In general, a mitigation bank sells compensatory mitigation credits (acres) to the **co-permittee**(s), whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor.

Wetland Specialist

A **person** having skill in the art and science of identifying, delineating, and assessing **wetlands**.

APPENDIX B

Watershed Specific Release Rates

[Under development]

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APPENDIX C

Legacy Sewer Permit Ordinance and

Manual of Procedures for the Administration of the Sewer Permit Ordinance



SEWER PERMIT ORDINANCE

AS AMENDED
July, 1999

AN ORDINANCE

AN ORDINANCE REGULATING THE ISSUANCE OF PERMITS FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF SEWERS, SEWERAGE SYSTEMS, TREATMENT FACILITIES AND SEWER CONNECTIONS DESIGNED TO DISCHARGE DIRECTLY OR INDIRECTLY INTO COLLECTION AND TREATMENT FACILITIES OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, OR INTO WATER WITHIN ITS TERRITORY, HEREAFTER TO BE KNOWN AS "THE SEWER PERMIT ORDINANCE."

For information or questions about this Ordinance, call the Local Sewer Systems Section of the MWRDGC's Engineering Department.

Phone: (312) 751-3260
Fax: (312) 751-7957

Adopted July 10, 1969
Latest Amendment: July 8, 1999

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
100 East Erie Street
Chicago, Illinois 60611
(312) 751-5600

BOARD OF COMMISSIONERS

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Jacqueline Torres, Director of Finance/Clerk

Be it ordained by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago

Section 1. **Authority and Purpose of this Ordinance.**

This Ordinance is adopted under the authority of 'an act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois rivers, as amended, "(Illinois Compiled Statutes, Chapter 70, Sections 7, 7a, 7aa, 7b and 7f) and of the powers granted to the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago, expressly or by necessary implication, under other provisions of said act, for the purpose of enabling the Metropolitan Water Reclamation District of Greater Chicago more effectively to protect the ability of its sewerage systems, interceptors, sewage disposal and treatment plants, works, and facilities to satisfactorily perform the functions for which they were designed, by controlling the nature, volume and the manner of discharge into said systems, plants, works, and facilities, and for the purpose of maintaining the stable operation of said systems and facilities, and for the protection of the waters within the district so as to preserve the public health.

Section 2. **Definitions.**

For the purpose of this Ordinance, the following definitions obtain:

(a) **Board of Commissioners**: The Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago.

(b) **District**: The Metropolitan Water Reclamation District of Greater Chicago, a municipal corporation, organized and existing under the laws of the State of Illinois.

(c) **General Superintendent**: The General Superintendent of the Metropolitan Water Reclamation District of Greater Chicago.

(d) **Industrial Waste**: The solids, liquid or gaseous waste resulting from any industrial, manufacturing, trade or business process or from the development, recovery or processing of natural resources.

(e) **Other Wastes**: All decayed wood, sawdust, shavings, bark, lime, refuse, ashes, garbage, offal, oil, tar, chemicals, and all other substances except sewage and industrial wastes.

(f) **Maintenance**: The action required to prevent failure of the sewerage system and preserve its original function.

(g) **Material Change**: Any deviation from the approved plans or specifications accompanying an application for which a permit has been issued under this Ordinance, that will affect capacity, flow or operation of a sewer, sewer system or connection to any sewer system.

(h) **Permittee**:

1. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body; or

2. any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body jointly with any individual, individuals or corporation where application is made for installations on private property; or

3. any individual, individuals, or corporation who owns property directly adjacent to any interceptor sewer of the Metropolitan Water Reclamation District of Greater Chicago, where direct connection to said interceptor is made or is contemplated by the owner of said property for the sole, exclusive and perpetual use of the owner of said property (and where the direct connection serves only that property immediately adjacent to said interceptor), who seeks permission to discharge sewage, industrial waste or other waste into facilities of the Metropolitan Water Reclamation District of Greater Chicago; or

4. any individual, individuals or corporation who provides an acceptable sewage treatment plant for the sole, exclusive and perpetual use of the owner, of the property being served thereby, which discharges into any waters or interceptor sewer of the Metropolitan Water Reclamation District of Greater Chicago in conformity with the ordinances of the Metropolitan Water Reclamation District of Greater Chicago, the rules and regulations of the Illinois EPA Division of Water Pollution Control and the statutes of the State of Illinois; or

5. any responsible individual, individuals, or corporation (not otherwise qualified as permittee under the provisions of Section 2(h)2, 3 or 4 of the Sewer Permit Ordinance), upon presentation of satisfactory evidence of responsibility as determined by the Board of Commissioners, where construction of sewers or sewerage systems is contemplated to serve property owned by said individual, individuals, corporation, in an unincorporated area, and the contemplated construction is intended for the sole, exclusive and perpetual use of the owner; provided that said unincorporated area is outside the jurisdiction of a local sanitary district and outside the area of a public utility company certificated for such service, and the township government declines to execute the permit application and to assume the obligations of a joint permittee, as provided in Section 2(h)2 of the Sewer Permit Ordinance.

(i.) **Sewage**: The water-carried human wastes or a combination of water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface, storm or other wastes as may be present.

Section 3. **Minimum Engineering Standards of Design and Construction and Maintenance and Flood Control.**

(a) In order to effect the intent and purposes of this Ordinance, it shall be the duty of the Board of Commissioners to establish appropriate written rules and regulations as to minimum engineering standards governing the design, construction and maintenance of sewers and sewerage systems within the territory of the District, including requirements as to types of materials, methods of installation, maximum permissible rates of infiltration and other engineering parameters.

(b) Effective January 1, 1972, no permits shall be issued for sewer construction in unsewered or separate sewered areas when construction of the facilities to be served by the proposed sewer would result in run-off in excess of that from its natural or undeveloped state, unless (1) the local government having jurisdiction over the area in which the construction is contemplated shall have adopted a storm water detention or flood control ordinance acceptable to the District, together with a drainage plan and time schedule for its implementation approved by the District, or (2) the run-off rate from the area be restricted to be no greater than that from its natural or undeveloped state and that detention space for the excess storm water be provided in accordance with the current Manual of Procedures of the District. Provision shall be made for proper maintenance of any such detention facility.

Section 4. **Permit Required for Sewer Construction.**

(a) It shall be unlawful for any person, corporation, sanitary district, school district or other entity to construct, maintain or operate any sewer, sewerage system or private treatment plant that has been planned or designed to discharge, either directly or indirectly, into any sewer, interceptor sewer, sewage treatment plant or other facility maintained and operated by the District, or into waters within the territory of the District, without first having obtained a permit in writing for the construction and operation of such sewer, sewerage system or private treatment plant, which permit shall have been duly approved and issued under the authority of the District, and according to the terms and provisions of this Ordinance.

(b) It shall be unlawful for any person or corporation to install a connection, addition, extension, opening or penetration of any kind into any sewer or interceptor sewer that discharges directly or indirectly into any

sewer, interceptor sewer, sewage treatment plant or other facility maintained and operated by the District; or into waters within the territory of the District, without first having obtained the written permit required under Section 4(a) of this Ordinance.

(c) No permit shall be required for any connections, changes, or additions to or extensions of existing sewerage systems that receive or may receive only domestic or sanitary sewage:

(1) From any building to be devoted solely to residential use, which contains less than twenty-five dwelling units; or

(2) From any building, the use of which will not involve the risk of introduction into the sewer system of industrial waste or other waste by accident, spillage or otherwise; provided, however, that it shall be a requirement of the District in the construction of such building that a control sanitary manhole shall be installed.

(d) The permit provided for in Section 4(a) of this Ordinance shall always be required for any proposed direct connection to any interceptor sewer or other facility owned or operated by the District.

(e) It shall be unlawful for the owner or occupant of any building for which a permit is not required hereunder to cause or permit a change of use of such building to a use for which a permit is required hereunder, without first having obtained the written permit required under Section 4(a) of this Ordinance.

Section 5. **Sewer Permit Application and Processing Fees.**

(a) Except as hereinafter provided, each sewer permit applicant shall pay to the District a sewer permit application and processing fee in accordance with the terms and conditions hereinafter set forth. These fees are subject to change on an annual basis.

(1.) A sewer permit application fee shall be remitted by an applicant with each permit application required to be made pursuant to this Ordinance. Said permit application fee shall be paid at the time of the filing of the sewer permit application, and no sewer permit shall be issued until all application and processing fees with respect thereto are paid in full.

(2.) The sewer permit application fee shall be computed on the basis of the following charges:

i. A $850.00 non-refundable permit application fee; or

ii. A $500.00 non-refundable sewer connection authorization application fee; or

iii. A $100.00 non-refundable notification and request for inspection (sewer replacement) fee; and

v. A $3.50 (three dollars fifty cents) for each foot of sanitary/combined sewer pipe included in the sewer permit application and any plans and specifications made a part hereof.

(Fees Amended at December 18, 1997 Board Meeting, effective January 1, 1998)

(3.) Exemptions:

i. Governmental agencies seeking to construct public works projects (where ownership and control of the project is reposed with the governmental agency), the cost of which is financed by the proceeds of ad valorem property taxation, user charges, special assessments, or municipal bonds shall be exempt from the fee provisions of this Ordinance;

ii. Municipalities and utility companies which apply for permits under this Ordinance to effect sewer rehabilitation work mandated by the District and The Illinois Environmental Protection Agency shall be exempted from the fee provisions of this Ordinance.

(4.) No refund or additional charges will be made with respect to the fees charged pursuant to this Ordinance if the final total fee, as determined from as-built plans for the project, varies by less than $100.00 from the original total fee paid.

(5.) In addition to the foregoing fees herein above established, a $50.00 processing fee shall be paid for each set of revised plans, drawings, specifications or any other supplementary filings submitted to the District by the applicant or his representative subsequent to the issuance of the permit.

(b) Connection Impact Fees

The Permittee/Co-permittee for any permit project, within Cook County, except for publicly owned facilities performing a local governmental function or real estate tax-exempt facilities and which discharge solely sewage into its sewers which is (a) thereafter annexed to the District, or (b) located in a greater than 500-acre Tax Increment Financing (TIF) district, shall pay a Connection Impact Fee to the District at a time that such area or a portion thereof is the subject of a sewer permit application to the District. The Connection Impact Fee will be assessed at the following rates per acre:

Residential Land Use	Units/Acre	Fee/Acre
Low Density and/or Medium Density	20 or less	$3,750
High Density	21 or more	$6,000
Other Land Use		
Commercial and/or Industrial	N/A	$7,500

For permit service areas in a greater than 500-acre TIF district only, a preliminary connection impact fee is computed by multiplying the acreage of each Permanent Index Number (PIN) in the permit service area by the appropriate unit fee set forth in the table above. The preliminary connection impact fee is multiplied by an adjustment factor which is equal to the number of years during the 12-year period immediately preceding the sewer permit application that real estate taxes for the District were **not paid** for that PIN in the permit service area, divided by twelve. The preliminary connection impact fee for each PIN in the permit service area is then multiplied by the adjustment factor. Each of the adjusted preliminary connection impact fees so computed is added together and the sum total is the Connection Impact Fee for the permit service area.

Ten percent (10%) of the Connection Impact Fee will be paid to the District with the sewer permit application. Fifty percent (50%) of the Connection Impact Fee will be paid no later than the first to occur of substantial completion or one year after construction begins. The remaining 40% of the Connection Impact Fee will be paid to the District no later than the first to occur of Permittee/Co-permittee's Request for Final Inspection or two years after sewer construction begins.

(c) Tax Increment Financing (TIF) District Service Fees for Sewer Permits issued with respect to projects within a TIF district other than for publicly owned facilities performing a local governmental function or real estate tax-exempt facilities and which discharge solely sewage into its sewers, shall be paid to the District for the duration of the TIF district. The municipal Permittee shall pay to the District an annual service fee equal to the difference between the amount of real estate tax paid to the District on account of each Permanent Index Number (PIN) in the permit service area and the actual cost of providing sewage transport and disposal service to those PINs. The amount of service fee for each parcel of real estate in the permit service area shall be calculated by multiplying the current equalized assessed valuation for each PIN in the permit service area by the tax rate for the District for each reporting year and then multiplying that product by the Operation, Maintenance and Replacement Factor established by the District for that tax year (as required by the District's User Charge Ordinance). That amount is compared to the

actual real estate tax receipts by the District for each PIN for that tax year. In the event the cost for providing actual sewage transport and disposal service exceeds the actual tax receipts by the District for that PIN, the difference is the Tax Increment Financing District Service Fee. The municipal Permittee shall furnish a tabulation to the Chief Engineer by September 1st of each year that the TIF district is in effect which shall list all parcels in the permit service area by PIN for each permitted project. For each PIN shown, he following information, which will be subject to audit and confirmation by the District shall be provided:

a) The amount of real estate taxes actually paid to the District by the Cook County Treasurer for each reporting year for each PIN in the permit service area.

b) The cost to the District for providing sewage transport and disposal services to each PIN in the permit service area, using the formula set forth above.

c) The difference between a) and b) above.

d) The TIF district service fee due to the District for that PIN, together with a total aggregate fee for that tax year for the permit service area.

The TIF District Service Fee shown to be owed in the tabulation shall be remitted to the District by the Permittee with the tabulation.

(Adopted at the Board Meeting of May 7, 1998;
Amended, Board Meeting of July 9, 1998;
Amended, Board Meeting of November 5, 1998;
Amended, Board Meeting of July 8, 1999)

Section 6. **Plans and Specifications to be Submitted.**

(a) All applications for permits required under Section 4 of this Ordinance shall be on forms prescribed by the District. Such applications shall be submitted to the General Superintendent, together with plans and specifications prepared by a licensed registered professional engineer, showing details of the proposed construction. The General Superintendent shall review the application, plans and specifications for the purpose of ascertaining whether or not they comply with the rules and regulations established under Section 3 of this Ordinance, and he may approve same and issue the permit, or he may reject such application, in which case he shall transmit to the applicant, within ten working days from the date of receipt of such application, a notice of such rejection, together with his written recommendations for such revisions and/or modifications as shall be required to meet with his approval, and no permit under Section 4 of this Ordinance shall be approved or issued without approval by the General Superintendent of the plans and specifications for the proposed construction. A copy of such approved plans and specifications shall be kept in the files of the District, and all construction performed under authority of the permit required under Section 4 of this Ordinance shall be done in strict compliance and conformity with such approved plans and specifications.

(b) In the event that it should be necessary or desirable to make material changes in the construction proposed under plans and specifications that have been approved as required under Section 6(a) of this Ordinance, revised plans and specifications shall be submitted, together with a written statement as to the reason for the proposed changes, and the General Superintendent may approve such revised plans and specifications, in which case he shall cause a supplemental written permit to be issued, or he may reject such revised plans and specifications on the same terms and in the same manner as is provided for such rejections under Section 6(a) of this Ordinance.

(c) All applications, plans and specifications shall be promptly reviewed, and the District shall, within ten working days of the receipt of each application, make written response to the applicant, or his agent, by approval, or by rejection, or by request for additional information.

(d) The rejection of any permit application shall be subject to reconsideration by the Board of Commissioners upon the written request of the applicant or his agent, made within twenty days of the receipt of such rejection, and the Board of Commissioners shall have twenty days from the receipt of

such request for reconsideration, within which to act thereon and respond to the applicant in writing.

Section 7. **Assignment of Permit.**

No permit issued under Section 4 of this Ordinance may be assigned or transferred without the consent in writing of the General Superintendent, and any such assignment or transfer without said written consent shall be void and of no legal effect.

Section 8. **Maintenance by the Permittee. —Bond Required in Certain Cases.**

(a) It shall be the duty and responsibility of every permittee to whom a permit has been issued for the construction and operation of any facility or connection under Section 4 of this Ordinance to keep said facility or connection in a proper state of repair and maintenance after same has been completed and placed in operation and use.

(b) No permits shall be issued for the construction, extension, operation and maintenance of sewage treatment plants, oxidation pond, or other treatment facility unless accompanied by a bond with sufficient surety to assure proper construction, extension, operation and maintenance of any such treatment plant, oxidation pond, or other sewage treatment facility within the borders of the District, said bond to terminate upon connection of said sewage treatment plant, oxidation pond, or other sewage treatment facility to an intercepting sewer or treatment plant of the District; and it shall be one of the conditions for issuing a permit for the construction, extension, operation and maintenance of a sewage treatment plant, oxidation pond or other treatment facility, that the person, persons, partnership or corporation requesting said permit be required in its or their application to agree that it/they will provide any additional security required by the Board of Commissioners of the District for the life of the permit, to guarantee full and complete performance including the execution of any and all documents that may be required by the Board of Commissioners in support thereof; and said bond shall be approved as to form and legality by the Law Department of the District; and as to engineering details by the Chief Engineer.

Section 9. **Construction Specifications where Permit is not required.**

All sewer connections from buildings where a permit is not required under the provisions of this Ordinance shall nevertheless conform to such minimum engineering standards as to design and construction and maintenance as are established by the General Superintendent to carry out the purposes of this Ordinance. Construction in flood hazard areas shall conform to all applicable, Federal, State and local flood plain requirements.

Section 10. **Violations. Notice—Hearing— Recommendation—Order.**

(a) Whenever it shall appear to the General Superintendent that a violation of any provision of this Ordinance may exist, including the fact that a permit required thereunder has not been issued, or that construction performed under authority of a duly issued permit does not comply with the conditions of such permit, or fails to conform with the plans and specifications that were approved in connection therewith, or that a sewer, sewerage system, treatment plant or facility or sewer connection is not being maintained and operated in accordance with the provisions of this Ordinance, the General Superintendent shall, as soon as practicable, notify the Permittee or whomsoever is responsible for the apparent violation to appear before the Board of Commissioners or its duly designated representative and show cause why he should not be found in violation of this Ordinance.

Such notice shall specify the time and place where a hearing will be held, and notice of such hearing shall be served personally or by registered or certified mail at least ten (10) working days before said hearing; and in the case of a municipality or a corporation such service shall be upon an officer or agent thereof. The Board of Commissioners may itself conduct the

hearing and take evidence, or may designate any of its members or any officer or employee of the District or any other person:

(1) To issue in the name of the Board notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in any such hearings; and

(2) To take the evidence.

Thereafter the Board of Commissioners shall review said evidence and any recommendations which may be presented in connection therewith, and shall make such findings and issue such orders as it deems appropriate to the enforcement of compliance with the provisions of this Ordinance. Testimony taken at the hearing provided for herein shall be under oath and recorded stenographically, and the transcript so recorded must be made available to any member of the public or to the respondent or party to such hearing upon payment of the usual charges therefore.

(b) When the violation referred to in Section 10 (a) above does not appear to be clearly willful, and does not involve an emergency endangering the public health, the alleged violator shall be made aware of the violation prior to the show cause hearing so as to allow the alleged violator an opportunity to correct the violation and secure compliance with the provisions of this Ordinance and the terms and conditions of permits issued hereunder prior to the show cause hearing.

(c) With respect to violations of the Sewer Permit Ordinance cited after August 31, 1984, an inspection fee of $100.00 shall be charged by the District for each on-site inspection made by the District to ascertain or confirm compliance by a violator hereunder with the construction, operation, and maintenance provisions of this Ordinance or permit issued pursuant to this Ordinance. Such inspection(s) shall be made when requested by a Permittee, or if no such request(s) is (are) made, then upon the compliance date established by an order of the Board of Commissioners, and thereafter as circumstances may reasonably require.

After a hearing on an alleged violation the Board may, in addition to any fine imposed, order any person found to have committed a violation to reimburse the District for the costs of the hearing, including any expenses incurred for inspection, sampling, analysis, administrative costs, and court reporter and attorney fees.

Payment of the above-described costs shall be made by the violator within 30 days of its receipt of an invoice therefore prepared and transmitted by the District to the violator. Invoices issued hereunder which shall be in arrears for more than 30 days shall be subject to an additional late payment charge of 1 1/2% per month until paid.

Section 11. **Penalties.**

Whoever violates any provisions of this Ordinance, or any amendment hereafter adopted, or fails to comply with an order of the Board of Commissioners issued in accordance with the provisions of this Ordinance shall be fined not less than one hundred dollars ($100.00) nor more than one thousand dollars ($1,000.00). Each day's continuance of such violation or failure shall constitute a separate offense. The Attorney for the District shall take such action as he may deem necessary to enforce collection and payment of all penalties, to restrain violations of, and to compel compliance with, the provisions of this Ordinance, and with the conditions of any permit issued hereunder.

Section 12. **Right to Repeal or Amend Ordinance.**

The District reserves the right at any time, and from time to time, to repeal or amend this Ordinance or any provisions thereof; and all permits are issued subject to such right. Where conditions so warrant, the Board of Commissioners after a hearing may waive any of the requirements of this Ordinance and waive any other requirements imposed by rules and regulations adopted for the implementation of this Ordinance.

Section 13. **Sewage and Waste Control Ordinance; Pollution Control Board Rule and Regulations.**

Any construction performed under a permit issued under the provisions of this Ordinance shall comply with the provisions of the District's 'Sewage and Waste Control Ordinance' and the rules and regulations of the Illinois Pollution Control Board, wherever the same are applicable.

Section 14. **Construction Under Former Ordinances.**

Construction under any permit issued prior to the effective date of this Ordinance shall be governed by the provisions of the ordinances in force at the time said permit was issued.

Section 15. **Permits not Required in Municipalities 500,000 Population.**

Nothing in this Ordinance shall be construed to require permits in municipalities having a population of over 500,000.

Section 16. **Effect of Court Decisions.**

If the provisions of any section of this Ordinance shall be declared unconstitutional or invalid by the final decision of any court of competent jurisdiction, the provision of the remaining paragraphs shall nevertheless continue in full force and effect.

Section 17. **Effective Date.**

This Ordinance became effective on the 1st day of January 1970. The last amendment became effective July 8, 1999.

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

MANUAL OF PROCEDURES
FOR
THE ADMINISTRATION
OF
THE SEWER PERMIT ORDINANCE

ENGINEERING DEPARTMENT
LOCAL SEWER SYSTEMS SECTION

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
100 East Erie Street
Chicago, Illinois 60611
(312) 751-5600

BOARD OF COMMISSIONERS

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Keith Smith, Director of Information Technology
Joseph P. Sobanski, Director of Engineering
Jacqueline Torres, Director of Finance/Clerk

AN ORDINANCE

The manual of Procedures is an Ordinance providing minimum Engineering Standards for the design, construction, operation and maintenance of sewers, sewerage systems, treatment facilities and sewer connections designed to discharge directly or indirectly into collection and treatment facilities of the Metropolitan Water Reclamation District of Greater Chicago, or into waters within its territory, supplementing the Sewer Permit Ordinance.

For information or questions about this Ordinance, call the Local Sewer Systems Section of the MWRDGC's Engineering Department.

Phone: (312) 751-3260
Fax: (312) 751-7957

Adopted September 3, 1970
Latest Amendment November 5, 1998

Foreword

The following pages of this Manual contain the design standards and the administrative requirements for the issuance of sewer permits and outline the procedures for permit application. The contents of this Manual have been formulated with the courteous assistance of a Blue Ribbon Committee representing a cross-section of concerned citizens, local governments, builders, contractors and consulting engineers, with a view towards facilitating the issuance of permits. It is hoped that this Manual will reach, and be used by as many hands as may be potentially involved in the preparation of the permit application and the other plans and documents related thereto. For if it does, it is our hope that it will properly serve the purposes it is intended for.

Let us assure you in this connection that the permit and all entries therein, together with the other information and documents related thereto, are individually designed to serve specific and related purposes in our overall responsibility for the protection of the health and welfare of the public. To be specific, the purposes served include: compliance of the project with the minimum design standards; prevention of pollution by controlling flows into the District systems, including flows into waters within the District; prevention of overflowing of the District interceptors and water reclamation plants; and, equally important, the assistance to the District in planning for the future to provide for flood control and to meet demands of population growth as reflected by new construction projects.

It is our sincere hope that this Manual will prove beneficial to you and that you will be generous in extending your cooperation and assistance so that, in turn, we will be able better to serve you and serve and protect the public.

MANUAL OF PROCEDURES
FOR THE ADMINISTRATION OF THE SEWER PERMIT ORDINANCE

Table of Contents

SECTION I-APPLICABLE RULES AND REGULATIONS

Article 1 PERMIT REQUIREMENTS

1-1	Purpose	1
1-2	Permit Requirements	1
1-3	Exemptions	1
1-4	Administrative Waivers	1
1-5	Permittees	1
1-6	Joint Permittees	2
1-7	Permittees Under Previous Ordinance	2
1-8	Definitions	2

Article 2 APPLICABLE RULES AND REGULATIONS

2-1	General	2
2-2	The Metropolitan Water Reclamation District of Greater Chicago	2
2-3	State of Illinois	2
2-4	U. S. Department of Housing and Urban Development	3
2-5	Standard Specifications for Water and Sewer Mains	3
2-6	Recommended Standards for Sewage Works (Ten State Standards)	3

SECTION II-DESIGN AND OTHER REQUIREMENTS

Article 3 DESIGN REQUIREMENTS

3-1	Minimum Design Standards	3
3-2	Design Slopes	3
3-3	Manholes, Drop Manholes	3
3-4	Protection of Water Mains	3
3-5	Materials	3
3-6	Workmanship	4
3-7	Design Flow	4
3-8	Curvilinear Sewer	4

Article 4 SUPPLEMENTAL DESIGN REQUIREMENTS

4-1	Overhead Plumbing	5
4-2	Datum	5
4-3	Pipe Bedding	5
4-4	Building Service Sewer	5
4-5	Connection of Building Service Sewer to Sewer Main	6
4-6	Inspection Manholes	6
4-7	Sound Engineering Practice	6

Article 5 CONSTRUCTION WITHIN THE FLOOD PLAIN
5-1 Issuance of Permit 6
5-2 Minimum Requirements 6
5-3 Conformance with Floodplain 7
5-4 Floodplain Highwater elevation and Limits 7
5-5 Statutory Floodplain Requirements 7

Article 6 STORM WATERS
6-1 Separation of Storm Waters and Sanitary Sewage 7
6-2 Combined Sewer Areas 8
6-3 Separate Sewer Areas 8
6-4 Storm Water Detention 9
6-5 Correction of Existing Deficiencies 11

SECTION III- **SUBMITTAL REQUIREMENTS**

Article 7 PROCEDURES FOR SUBMITTALS
7-1 Documents to be Submitted 14
7-2 Consultation with the District 15
7-3 Plans 15
7-4 Project and Plan Titles 15
7-5 Specifications 15
7-6 Seals and Signatures 15
7-7 The Illinois Professional Engineering Act 15
7-8 Connection to Private Sewers 15

Article 8 RESIDENTIAL AND NON-RESIDENTIAL PROJECTS
8-1 Trunks and Laterals 15
8-2 Residential Multi-Family Buildings 16
8-3 Commercial Buildings 16
8-4 Industrial Buildings 17
8-5 Treatment Facilities 17
8-6 Lift Stations 17

SECTION IV- **CONSTRUCTION, TESTING AND APPROVAL**

Article 9 CONSTRUCTION AND INSPECTION
9-1 Advance Notice 17
9-2 Conformance to Plans and Specifications 17
9-3 Construction Inspection 17
9-4 Record Drawings 18

Article 10 TESTING AND APPROVAL
10-1 Requirement for Testing 18
10-2 Request for Final Inspection 18
10-3 Construction without Advance Notice 18
10-4 Maximum Allowable Infiltration 18

MANUAL OF PROCEDURES
FOR THE ADMINISTRATION OF THE SEWER PERMIT ORDINANCE

SECTION I—APPLICABLE RULES AND REGULATIONS

Article 1. PERMIT REQUIREMENTS

1-1. **Purpose**. The "Manual of Procedures for the Administration of the Sewer Permit Ordinance", contained herein, is issued for the implementation, administration and enforcement of the provisions of The Sewer Permit Ordinance of the Metropolitan Water Reclamation District of Greater Chicago, hereinafter known as the "District".

The Engineer of Local Sewers is designated as the authorized representative of the General Superintendent to receive and review permit applications, to inspect and approve construction under the permit, and to investigate violations of the Ordinance.

1-2. **Permit Requirements**. Except as provided in Article 1-3, Exemptions, and Article 1-4, Waivers, permits are required for all construction of sewers and sewer facilities within the territorial boundaries of the District, whether such construction is on private or public property. A permit is also required for existing buildings when the use of the building changes to a use for which a permit is required. Unless the Ordinance contains clear language granting a specific exemption as indicated herein, the intent is that no exemption is granted. It is the responsibility of the General Superintendent to interpret, administer and enforce the Ordinance within the authority granted to him by the Board of Commissioners.

1-3. **Exemptions.** A building service sewer (See Article 4-4) constructed to serve a single building devoted solely for residential purposes and containing less than twenty-five (25) dwelling units is exempt from the sewer permit requirement. Any extension of said service sewer is a violation of the Ordinance.

Any sewer constructed in the public right-of-way or easement, except for crossing, is considered a lateral and is not exempt from the permit requirement, even though it may serve a single building containing less than twenty-five (25) dwelling units. Except as herein provided, all other construction requires a permit.

1-4. **Administrative Waivers**. Administrative Waivers for some non-residential buildings may be available to Permittees meeting specific requirements which minimize or eliminate industrial wastes.

1-5. **Permittees.** The District recognizes as Permittees the parties listed below as provided in Section 2(h) of the Ordinance. The Permittee is held responsible for compliance with the conditions of the permit.

a. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body.

b. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body jointly with any individual, individuals or corporation where application is made for installations on private property.

c. Any individual, individuals, or corporation who owns property directly adjacent to an interceptor sewer of the District, where direct connection to said interceptor is made or is contemplated by the owner of said property for the sole, exclusive and perpetual use of the owner of said property (and where the direct connection serves only that property immediately adjacent to said interceptor), who seeks permission to discharge sewage, industrial waste or other waste into facilities of the District.

d. Any individual, individuals or corporation who provides an acceptable sewage treatment plant for the sole, exclusive and perpetual use of the owner of the property being served thereby, which discharges into any waters or interceptor sewer of the District in conformity with the Ordinances of the District, the Rules and Regulations of the Illinois Pollution Control Board, the Illinois Environmental Protection Agency, and the Statutes of the State of Illinois.

e. Any responsible individual, individuals, or corporation, (not otherwise qualified as permittee under the provisions of Section 2(H)2, 3 or 4 of the Sewer Permit Ordinance), upon presentation of satisfactory evidence of responsibility as determined by the Board of Commissioners, where construction of sewers or sewerage systems is contemplated to serve property owned by said individual, individuals, or corporation, in an unincorporated area, and the contemplated construction is intended for the sole, exclusive and perpetual use of the owner; provided that said unincorporated area is outside the jurisdiction of a local sanitary district and outside the area of a public utility company certificated for such service, and the township government declines to execute the permit application and to assume the obligations of a joint permittee, as provided in Section 2(H)2 of the Sewer Permit Ordinance.

1-6. **Joint Permittees**. In addition to those cases where the requirement for joint permittee is mandatory under the Ordinance, permits may be issued to joint permittees if so requested by the local governmental body having jurisdiction.

1-7. **Permittees Under Previous Ordinance.** Nothing contained in Article 1-4 shall operate to annul permits previously issued for the construction of sewers under the Ordinance then in effect, except that in unincorporated areas where a permit had been issued to an individual owner as Permittee, if said owner/Permittee shall abandon, or transfer the ownership of, the sewer system constructed under a permit and the area served becomes subsequently incorporated or is annexed to a duly constituted local government, sanitary district or utility company, the local authority assuming jurisdiction over the area shall thereby become the Permittee for said system and shall thereafter be responsible for the proper maintenance and operation of the system.

1-8. **Definitions**. For the purposes of the District, the following definitions shall apply:

a. "Sewage" means water-carried human wastes or a combination of water-carried wastes from residences, business buildings, institutions and industrial establishment, together with such ground, surface, storm or other wastes as may be present.

b. "Industrial Waste" means the solids, liquids or gaseous waste resulting from any industrial, manufacturing, trade or business process or from the development, recovery or processing of natural resources.

c. "Other Wastes" means all decayed wood, sawdust, shavings, bark, lime, refuse, ashes, garbage, offal, tar, chemicals and other substances except sewage and industrial wastes.

d. "Maintenance" means keeping the sewer lines, sewer systems, sewer facilities or sewage works and structures in satisfactory working condition and good state of repair,

(including but not limited to preventing any obstructions or extraneous materials or flows from entering said facilities, protecting said facilities from any damage, and keeping same free from defects or malfunctions), and making necessary provisions and taking necessary precautions to assure that said sewer facilities are at all times capable of satisfactorily performing the services, and adequately discharging the functions and producing the final results and purposes said facilities are intended to perform, discharge or produce.

Article 2. **APPLICABLE RULES AND REGULATIONS**

2-1. **General**. The most current copy of the rules, regulations, ordinances and policies listed below which are issued by the authorities indicated are incorporated herein by reference.

2-2. **The Metropolitan Water Reclamation District of Greater Chicago.**

a. The Sewer Permit Ordinance.

b. The Sewage and Waste Control Ordinance.

c. The rules, regulations, resolutions, policies, directives and instructions that may be adopted or issued from time to time by the Board of Commissioners.

d. The administrative procedures or directives issued by the General Superintendent.

2-3. **State of Illinois, Title 35, Illinois Administrative Code.**

a. Pollution Control Board Technical releases and other applicable rules and regulations issued.

b. The "Illinois Recommended Standards for Sewage Works" (Part 370).

2-4. **U.S. Department of Housing and Urban Development.**

a. Minimum Design Standards for Community Sewage System.

2-5. **Standard Specifications for Water and Sewer Main Construction in Illinois.**

2-6. **Recommended Standards for Sewage Works; (Ten State Standards)**

The standards under Article 2-4, 2-5 and 2-6 are incorporated only to the extent that they are not in conflict with the above requirements or with any other provisions in this Manual.

SECTION II - **DESIGN AND OTHER REQUIREMENTS**

Article 3. **DESIGN REQUIREMENTS**.

3-1. **Minimum Design Standards**. All design and construction of sewers and sewer systems within the territorial boundaries of the District shall be governed by the minimum standards contained in the rules and regulations incorporated under Article 2 above, as supplemented by the provisions outlined herein.

All sewer systems, whether private or public, and whether constructed on private or public property, including sewer construction exempted from the permit requirement, shall

conform to the design standards and other requirements contained herein.

3-2. **Design Slopes.** Minimum and maximum slopes are tabulated below. The slopes are those that produce minimum and maximum velocities of 2.0 fps and 15.0 fps based on Kutter's Formula, with "n" equal 0.013, and the pipe flowing full, as provided in the rules and regulations of the Illinois Pollution Control Board.

Sewer Size-Inches	Minimum Slope Percent	Maximum Slope Percent
6 (Service Sewers)	1.00	33.0
8	0.40	22.0
10	0.28	15.0
12	0.22	11.0
14	0.17	9.0
15	0.15	8.3
16	0.14	7.8
18	0.12	6.5
21	0.10	5.1
24	0.08	4.2

3-3. **Manholes, Drop Manholes**. An exterior drop pipe should be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert, as provided in the State of Illinois Title 35, Part 370. The minimum diameter of any manhole shall be 48 inches. The diameter of the drop pipe shall preferably be larger than, or of the same diameter as, the entering sewer. The minimum diameter of the drop pipe shall not be smaller than the diameter of the entering sewer by more than two nominal diameters (e.g. for 12", 15" and 18" entering sewer, the drop shall be 8", 10" and 12" respectively), provided that the minimum diameter of the drop pipe shall not be less than 8". If a smaller drop is desired, design calculations and configurations shall be submitted for review and approval. The drop pipe shall be encased in concrete. The flow channel through manholes shall be made to conform in shape and slope to that of the sewers. A bench shall be provided which shall have a minimum slope of two (2) inches per foot.

3-4. **Protection of Water Mains**. Water mains shall be protected in accordance with the requirements of the State of Illinois Recommended Standards for Sewage Works (Title 35 Part 370). Where a sewer main lateral or building service sewer crosses a water main, a minimum vertical separation of 18" shall be provided between the top of the lower pipe and the bottom of the upper pipe. Where the 18" vertical separation is not provided, the sewer shall be designed and constructed of pipe equal to water pipe or shall be encased in concrete for a minimum distance of 10 feet on each side of the water main.

3-5. **Materials**. All materials shall conform to the applicable ASTM, ASA or other national or accepted standards. When the materials indicated below are specified by the design engineer, the materials and the joints for pipe made of that material shall conform to the specifications shown, for sanitary sewer work in separate areas and for all sewer work in combined areas:

	Material	Pipe Spec.	Joint Spec.
a.	Vitrified Clay Pipe		
	Standard Strength	ASTM C-700	ASTM C-425
	Extra Strength	ASTM C-700	ASTM C-425
b.	Concrete Sewer Pipe	ASTM C-14	ASTM C-443
c.	Reinforced Concrete		

	Sewer Pipe	ASTM C-76	ASTM C-443
d.	Asbestos Cement Pipe	ASTM C-428	ASTM D-1869
e.	Truss Pipe		
	Solid wall 6 " Dia. SDR 35	ASTM D-2751	ASTM D-2751
	Truss Wall 8" to 15" Dia.	ASTM D2680	ASTM D-3212 ASTM D-2680
f.	Cast Iron Soil Pipe	ASTM A-74	ASTM C-564
g.	Ductile Iron Pipe	ANSI A21.51	ANSI A21.11
h.	Polyvinyl Chloride (PVC) Pipe		
	6" to 15" Dia. SDR 35	ASTM D-3034	ASTM D-2855 ASTM D-3212
	18" to 27" Dia. F/dy=46	ASTM F-679	ASTM D-2855 ASTM D-3212

Nothing contained in this Article shall be interpreted to mean nor imply an endorsement by the District of any material over another, nor an opinion by the District regarding the equality or superiority of the performance qualities of any of the materials.

3-6. **Workmanship**. As a minimum requirement all sewer pipes shall be laid in accordance with the applicable ASTM specification. The specifications for the construction of any sewers within the District shall not be less stringent than the latest version of the "Standard Specifications for Water and Sewer Main Construction in Illinois," adopted by a joint committee of the Illinois Society of Professional Engineers, Consulting Engineers Council of Illinois, Illinois Municipal League and The Associated General Contractors of Illinois. A copy of said specifications is obtainable from the organizations mentioned.

3-7. **Design Flow**. Average design flow for sanitary sewer shall be 100 gpcpd. Maximum design flow for sanitary sewer lines shall be determined by one of the equations indicated below; provided, however, that the maximum design flow for sewer laterals need not exceed 400 gpcpd and the maximum design flow for sewer mains and trunks shall not be less than 250 gpcpd.

Equation 1. $Q = \frac{500}{\sqrt{P}}$

Equation 2. $Q = 100\left(1 + \frac{14}{4+\sqrt{P}}\right)$

Q = Maximum design flow, gpcpd
P = Population in thousands

3-8. **Curvilinear Sewer**. Available information based on field data falls short of providing conclusive evidence in support of the practice of curvilinear alignment for sewers 24" or less in diameter. Where local governments elect to permit the construction of curvilinear sewer, it is mandatory that available maintenance equipment be evaluated and proper equipment acquired.

When permitted by the local government, construction of sewers 24" or less in diameter on curvilinear alignment shall be subject to the following criteria.

a. **Alignment**: Alignment shall follow the general alignment of the street. Curvilinear sewer alignment shall be limited to curved street areas.

b. **Curvature:** Only simple curves may be used.

c. **Radius:** Minimum radius shall be no less than 200 feet.

d. **Minimum Slope**: The minimum slope shall be that which produces a minimum velocity of 2.0 fps. (Hydraulics of curvilinear alignment to be taken into account.)

e. **Manhole Location**: Manholes are required at the point of beginning and at the end of the curve and at the point of inflection. (PC, PT and PRC).

f. **Deflection:** Deflection of pipe shall not exceed the maximum deflection recommended by the joint manufacturer. The deflections shall be uniform and the finished installation shall follow a smooth curve.

Article 4. SUPPLEMENTAL DESIGN REQUIREMENTS.

4-1. **Overhead Plumbing**. After December 31, 1970, all new buildings with basements, floors, rooms or occupancy areas below ground level at the building site and served by a public or private sewer system, shall have overhead plumbing. No permit application will be accepted, nor any permits issued after December 31, 1970, to any municipality or local government unless said municipality or local government shall have adopted an ordinance requiring overhead plumbing, and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

4-2. **Datum**. The datum shall be indicated on the plans submitted. All plans shall preferably be based on the Chicago City Datum which is established as: 0.00C.C.D=579.48 ft. above Mean Sea Level (1929 Adjustment) or 579.88 ft. above Mean Tide New York. If any other datum is used, a conversion equation shall be shown on the plans to relate the datum used to the Chicago City Datum.

4-3. **Pipe Bedding**. Bedding, other than concrete embedment, shall consist of gravel, crushed gravel, crushed stone or crushed slag, 1/4" to 1" in size. As a minimum, the material shall conform to the requirements of Article 704.01 of the "Standard Specifications for Road and Bridge Construction," of the State of Illinois or ASTM C-33. The gradation shall conform to gradation CA 11 or CA 13 of the Illinois Standard Specifications or to ASTM Gradation No. 67. The pipe shall be laid so that it will be uniformly supported and the entire length of the pipe barrel will have full bearing. No blocking of any kind shall be used to adjust the pipe to grade except when used with embedment concrete. Bedding shall be required for all sewer construction, except ductile iron pipe, and shall be of a thickness equal to 1 /4th of the outside diameter of the sewer pipe with a maximum required thickness of eight inches (8") but shall not be less than four inches (4"). Where polyvinyl chloride (PVC) pipe is specified, the backfill material to a level two inches (2") over the top of the pipe shall be of the same material as the bedding material specified above and shall be carefully placed so as to completely fill the space under and around the pipe, in eight inch layers, loose measurement, and compacted to the satisfaction of the Inspection Engineer named in the permit.

Where unsuitable material is encountered at the grade established, all such unsuitable soil shall be removed under the pipe and for the width of the trench, and shall be replaced with well compacted bedding material, to the satisfaction of the Inspection Engineer named in the Permit.

Where rock is encountered, it shall be removed below grade and replaced with a cushion of well compacted bedding material having a thickness under the pipe of not less than eight inches (8") for all types of pipe including ductile iron pipe.

4-4. **Building Service Sewer.** Building service sewer is defined as a sewer pipe

receiving flow from a single building and connecting to a sewer main or lateral, and constructed on private property, except for street crossing. The maximum length of a building service sewer shall preferably be 120 ft. and shall not exceed 150 ft. If the length is exceeded an intermediate manhole shall be built. A manhole or clean-out shall also be installed every 150 ft. When the building service sewer connects to a sewer lateral of a size not larger than the size of the service sewer, a manhole shall be built at the point of connection. The minimum slope of the service line shall be one percent (1%).

Minimum design standards, and other requirements hereof, governing materials, joints, infiltration, workmanship and maintenance for sewer mains and laterals shall also apply to building service sewers. Horizontal and vertical alignment of the service sewer shall be uniform and shall follow a straight line alignment. There shall be no dips in the grade or fall of the line. Turns or bends required for the riser, if any, necessary to connect to the sewer wye or tee, shall be made with standard bends.

In those instances where the building service sewer is partially constructed from the sewer lateral or main to a point other than the building to be served, the pipe shall be tightly plugged using a manufactured plug. The plug shall be pre-wired by the manufacturer so that it can be firmly secured in place.

4-5. **Connection of Building Service Sewers to Sewer Mains.** Building service sewer shall generally enter the sewer main or lateral by way of an existing wye or tee. In the event of absence of the wye or tee, the connection to the sewer main or lateral shall be made by one of the methods indicated below. If another method is desired, a detail shall be submitted for review and approval by the District before the connection is made. Indiscriminate breaking of the sewer main pipe is not allowed.

a. Installation of a manhole.

b. Circular saw-cut of sewer main by proper tools ("Shewer-Tap" machine or similar), and proper installation of hub wye saddle or hub tee saddle, in accordance with manufacturer's recommendations.

c. Remove an entire section of pipe and replace with a wye or tee branch section. Pipe section shall be removed by breaking only the top of one bell. After the wye or tee branch is inserted, concrete shall be placed over the broken area to a minimum thickness of four inches (4") and to a dimension of eight inches (8") in all directions.

d. Using pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting. Use "Band-Seal" couplings, or similar couplings, and shear rings and clamps to fasten the inserted fitting and hold it firmly in place. Follow manufacturer's recommendations for the installation.

4-6. **Inspection Manholes.** An inspection manhole having a minimum diameter of 48" is required for all commercial and industrial buildings. The manhole shall be constructed on the building service sewer before it connects to the sewer main, and preferably shall not be closer than five (5) ft. to the building. There shall be no flow into the inspection manhole except flow from the building or buildings for which the inspection manhole is intended. Manholes constructed on public sewer, or on sewers receiving other flows are not considered inspection manholes.

4-7. **Sound Engineering Practice.** The design and supplementary design requirements contained herein do not

replace and are not a substitute for sound engineering practice nor the professional ability and judgement of the design engineer.

Article 5. CONSTRUCTION WITHIN THE FLOODPLAIN

5-1. **Issuance of Permit**. No permit will be issued for sewer construction within any municipality lying totally or partially within a floodplain, unless the municipality shall have adopted a Floodplain Ordinance which has been filed with and approved by the District as to minimum requirements for the protection of the health and welfare of the public.

5-2. **Minimum Requirements**. Floodplain Ordinances adopted by the municipality shall include the following minimum requirements.

a. **Elevations and Limits.** Highwater elevations and limits of floodplain shall be established by the Ordinance based on the 100-year flood, as determined by the most recent and best available data listed in Article 5-4 below. If the 100-year flood information is not available, the regulatory base flood shall be the flood of record. When data of higher order becomes available, data of lower order shall not be used for regulatory purposes.

b. **Building Openings.** A door sill, window sill, top of foundation, or the bottom of any other opening in the outer walls of a building or structure shall be constructed at an elevation not lower than 12"above the established highwater elevation of the 100-year flood and not lower than 12" above the highwater elevation of the flood of record, if the 100-year flood information is not available.

c. **Overhead Sewers.** When the building wall encloses open space that is below the base flood elevation, gravity storm and sanitary sewer connections are specifically prohibited and overhead sewers are required for the sanitary connections and sumps for the storm sewer connections.

d. **Existing Buildings**. Existing buildings to be connected into a proposed sewer system within a floodplain must have sanitary connections designed to protect the sewer system from flooding.

e. **Floodways**. Adequate flood channel provisions should be provided. The width of the floodway should be determined in the field and should be protected from encroachment by the zoning ordinance and by the use of building setbacks. Floodway easements should be provided which permit necessary public channel maintenance and improvement work.

f. **Floodproofing.** That part of the structure constructed within floodplain areas below the highwater elevation must be floodproofed. The design must include measure to cope with sewer backup, groundwater seepage, and hydrostatic pressure.

g. **Sanitary Manholes.** All sanitary sewer manholes constructed in the floodplain must be provided with watertight, lock-type covers, or the rims must be raised to an elevation not lower than 12" above the highwater elevation.

5-3. **Conformance with Floodplain Ordinance.** All projects constructed within a floodplain area shall conform to the requirements of the floodplain ordinance adopted by the local government having jurisdiction over the area in which the project

is located. The portion of the project lying within the floodplain shall be delineated and the limits of the floodplain shall be clearly indicated on the overall plans submitted to the District as part of the permit application.

5-4. **Floodplain Highwater Elevation and Limits.** In reviewing submittals for sewer permits, the District will base its review on the highwater elevations and limits of the 100-year flood as established by the most recent and best available data. If the 100-year flood information is not available, the review will be based on the flood of record data. The data which will be used by the District is listed below in descending order of overall accuracy, completeness, and currentness. When data of higher order becomes available, data of lower order will not be used.

(1) HUD Flood Insurance Studies (FIS), if certified by Illinois Department of Transportation, Division of Water Resources (IDOT-DWR).

(2) IDOT-DWR Regulatory Floodplain Maps and Profiles.

(3) Soil Conservation Service-Metropolitan Water Reclamation District of Greater Chicago (SCSMWRDGC) Floodwater Management Plans, using the "without project" data shown therein.

(4) Other detailed 100-year flood studies, if certified by IDOT-DWR.

(5) HUD Flood Hazard Boundary Maps (FHBM) and Approximate FIS Data.

(6) USGS Maps of Flood-prone Areas.

(7) USGS-NIPC Hydrologic Investigation Atlases (Floods of Record).

When either the HUD Flood Hazard Boundary Maps or the USGS Maps of Flood-prone Areas are used to determine the limits of the floodplain, then regulatory highwater elevations shall be those of the flood of record.

5-5. **Statutory Floodplain Requirements.** All construction in the floodplain must meet the requirements of the Rules and Regulations issued by the Illinois Department of Transportation, Division of Water Resources, pursuant to "An Act in Relation to the Regulation of the Rivers, Lakes, and Streams of Illinois" as amended. For any construction within the floodplain, the Illinois Department of Transportation permit for such construction or, in the alternative, a written statement from the Illinois Department of Transportation that no permit is required shall be submitted to the District prior to the issuance of a District permit.

Article 6. **STORM WATERS.**

6-1. **Separation of Storm Waters and Sanitary Sewage.** Except as provided in Article 6-2 below, all new sewer construction shall provide two separate and distinct sewer systems as follows:

a. **Storm Sewer Systems.** The system shall be for the collection and conveyance of surface run-off and other storm waters. All storm waters shall be collected and conveyed in a pipe or ditch system to the point of discharge in the receiving natural or man-made stream or drainage ditch. No storm waters shall be allowed to enter the sanitary sewer systems except that in "Combined Sewer Areas" only, the storm waters are allowed to be discharged into the District interceptors.

b. **Sanitary Sewer Systems.** The system shall be for the collection and conveyance of sanitary sewage consisting of domestic and other water-borne wastes. All sanitary sewage shall be collected and conveyed in a pipe system to the point of discharge into an existing sanitary sewage system, District interceptor or treatment plant. No sanitary sewage shall be allowed to enter any storm sewer system or discharge onto the ground or into receiving streams, without first having been treated.

6-2. **Combined Sewer Areas.** In areas designated as "Combined Sewer Areas" on the District maps, the following requirements shall apply:

a. **Separation.** Complete separation of sewers shall be provided within the property lines.

b. **Detention.** Detention shall be provided and/or permanent constrictions shall be built on the storm sewer system to control the flow into the existing combined system in accordance with the requirements of the local government.

c. **Down-Spouts.** All down-spouts or roof drains shall discharge onto the ground or be connected to the storm or combined sewer. No down-spouts or roof drains shall be connected to the sanitary sewers.

d. **Footing Drains.** Footing drains shall be connected to sump pumps, and discharge shall be made into storm sewers, combined sewers or drainage ditches. No footing drains or drainage tile shall be connected to the sanitary sewer. After December 31, 1970 all new construction shall conform to the requirements of this paragraph. No permit application will be accepted, nor any permits issued after December 31, 1970 to any municipality or local government unless said municipality or local government shall have adopted an ordinance reflecting the requirements of this paragraph and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

e. **Floor Drains.** Floor drains in basements shall be connected to sump pumps and discharged to the sanitary or combined sewers.

f. **Sump Pumps.** Sump pumps installed to receive and discharge ground waters or other storm waters shall be connected to the storm or combined sewers or discharge into a drainage ditch. Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary or combined sewers. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of sanitary sewage.

6-3. **Separate Sewer Areas.** In areas served by separate sewer systems, the following requirements shall apply:

a. **Down Spouts.** All down-spouts or roof drains shall discharge onto the ground or be connected to storm sewer. No down-spouts or roof drains shall be connected to the sanitary sewers.

b. **Footing Drains.** Footing drains shall be connected to sump pumps, and discharge shall be made into storm sewers or drainage ditches. No footing drains or drainage tile shall be connected to the sanitary sewer. After December 31, 1970, all new construction shall conform

to the requirements of this paragraph. No permit application will be accepted, nor any permits issued after December 31, 1970, to any municipality or local government unless said municipality or local government shall have adopted an ordinance reflecting the requirements of this paragraph and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

c. **Floor Drains.** Floor drains in basements shall be connected to sump pumps and discharged to the sanitary sewers.

d. **Sump Pumps.** Sump pumps installed to receive and discharge ground waters or other storm waters shall be connected to the storm sewer or discharge into a drainage ditch. Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary sewers. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of sanitary sewage.

e. **Completion of Storm Sewer System.** The construction of the proposed storm sewer system shall be completed before the sanitary sewer system is put in service. When compliance with this requirement may cause an undue hardship to the Permittee, the Permittee shall so notify the District and the District may waive this requirement if the conditions so warrant.

f. **Window Well and Area-Way Drains.** No window well or area-way drains shall be connected to the sanitary sewer.

6.4 **Storm Water Detention in Unsewered and Separate Sewered Areas.**

a. **General.** It is recognized that the receiving streams within the District do not have the capacity to receive and convey the increased storm water runoff resulting from rapid urbanization occurring in many areas. These receiving streams are subject to frequent flooding which results in a growing rate of property damage.

It is the intent of Section 3(B) of the Sewer Permit Ordinance to encourage local governments and developers to jointly participate in providing detention storage to eliminate the excessive runoff during heavy storm periods. Where impervious areas are planned or contemplated, it is the intent that detention be provided as required by the provisions hereinafter set forth. It is proposed that well maintained landscaped areas would be provided to act jointly as detention reservoirs and recreation facilities or aesthetic focal points in new village parks, either in incorporated or unincorporated areas, forest preserve areas, county parks, housing developments, shopping centers, industrial parks, etc. Other control methods to regulate the rate of storm water discharge which would be acceptable include detention on flat roofs, parking lots, streets, lawns, underground storage, oversized storm sewers with restricted outlets, etc.

It is recognized that in order to better serve the long-range interests of the local communities and the Metropolitan area, comprehensive basin-wide planning for flood control should be formulated, adopted and implemented. Comprehensive planning is far more beneficial than the proliferation of small, on-site detention areas, although on-site detention does provide protection and is acceptable for compliance with this Ordinance. The District may be called upon by the local governments to render advisory, technical and other assistance for the

formulation and implementation of a drainage plan.

b. **Requirements**. Pursuant to the provisions of Section 3(B) of the Sewer Permit Ordinance, a sewer permit will not be issued after January 1, 1972, unless (1) The permittee (governmental body) has adopted a Storm Water Detention or Flood Control Ordinance acceptable to the District, and has on file with the District, an approved drainage plan and schedule for its implementation, or (2) The permittee or co-permittee provide detention of storm water runoff as set forth in the following criteria.

(1) **Allowable Release Rate.** The release rate of storm water from all developments requiring detention shall not exceed the storm water runoff from the area in its natural undeveloped state.

Because of the flat conditions of the land in this area, channel configurations cut by nature are generally unable to handle the runoff from high intensity rainfalls and results in flood plain storage or spreading of runoff over the land areas during the larger storm periods. In order not to increase the runoff from such areas after development, the release rate must be limited to the carrying capacity of these natural channels.

The District will accept the release rate of not greater than that calculated from a storm of three (3) year frequency with a runoff rate coefficient of 0.15, unless the applicant can show by his detail calculations, which are acceptable to the District, that the discharge rate of the natural outlet channel serving the area is greater.

(2) **Bypass.** Drainage systems shall have adequate capacity to bypass through the development the flow from all upstream areas for a storm of design frequency assuming that the land is in a fully developed state under present zoning or zoning proposed under a Comprehensive Plan. The bypass flow rate shall be computed utilizing a runoff coefficient of not less than 0.35. An allowance will be made for upstream detention when such upstream detention and release rate has previously been approved by the District and that evidence of its construction can be shown.

(3) **Design Storm.** The live detention storage to be provided will be calculated on the basis of the 100-year frequency rainfall as published by the U.S. Weather Bureau for this area. The detention volume required will be that necessary to handle the runoff of a 100-year rainfall, for any and all durations, for the fully developed drainage area tributary to the reservoir, less that volume discharged during the same duration at the approved release rate.

c. **Exemptions.** Under the provisions of this article, storm water detention facilities meeting the criteria and requirements established herein are not required by the District for the following projects, provided that the available outlet capacity is adequate as determined by the Municipal Engineer. If the outlet capacity is not adequate, then detention as determined by the Municipal Engineer will be required to store that portion of the runoff exceeding the outlet capacity.

(1.) Real estate developments occupied or operational prior to January 1, 1972. If redevelopment, thereof in whole or in

part, subsequently occurs, the exemption shall cease. Redevelopment occurs when a permit application is made to the District for a new sanitary sewer in the original development area. Redevelopment requires storm water detention for the entire original development area.

(Amended at the Board Meeting of November 5, 1998)

(2) Non-residential projects having a total area of less than five acres.

(3) Residential non-single family projects having a total area of less than five acres.

(4) Residential single-family projects having a total area of less than ten acres.

d. **Special Provisions:**

(1.) **Multiple Outlets.** In order to eliminate small multiple outlets, generally designs requiring a release pipe of less than four (4) inches in diameter are not acceptable.

(2) **Affidavit of Disclosure of Property Interest.**

(a) As part of the submittal documents, for projects in the separate sewered areas, the owner of the property upon which the project (for which the permit application is made) is located, shall furnish in all instances an Affidavit of Disclosure Property Interest stating the aggregate total area of said property and all other lands contiguous to said property in which the owner holds an interest. The applicability of the detention requirements will be based on the total contiguous area in which an interest is held by the owner.

(b) Where a permit application is made for sanitary sewer and the area serviceable by the sewer is under the control of an individual or a legal entity (directly or indirectly, in part or in full), the area of the project (for the purpose of determining the applicability of the detention requirements) shall be considered to be the total area owned or controlled by the applicant, and detention facilities or provisions shall be made as part of the permit for the total area. If the area serviceable by the sewer is not in its entirety under the control of the applicant, the applicant shall be responsible to provide detention facilities only for that part of the area which is under his control.

c. In all instances where the property which is the subject of a permit is less than five (5) acres (or less than ten acres for residential single family projects) and detention is not provided as part of the permit, the applicant shall furnish to the District, as part of the submittal, an Affidavit of Disclosure of Property Interest with respect to the property, which is the subject of the permit stating that:

(i.) The owner of the property has no interest, nor did he have any interest at any time during the previous two years in any land contiguous to said property, such that the aggregate total area of the property and the contiguous lands exceeds five (5) acres.

(ii.)The owner covenants and agrees that if within two years after the issuance of the permit he acquires any interest in lands contiguous to the property such that the

aggregate area of the property and the contiguous lands exceeds five (5) acres, the owner shall provide for storm water detention for the entire aggregate area.

(iii.) No owner of any lands contiguous to the property has any interest in the property such that the aggregate total area of the property and the contiguous lands exceeds five (5) acres.

For the purpose of this article, the following definitions shall apply:

Owner: means record title holder or a beneficiary of a land trust which is the record title holder, and includes singular and plural; if the owner is other than an individual, the term includes beneficiaries, agents, shareholders, officers and directors.

Ownership: means holding of record title or any beneficial interest.

Interest: means property interest or contractual interest, legal or equitable, directly or indirectly, in part or in full, and includes option to buy. In the case of a shareholder interest, the shareholder shall be deemed to have an interest if he owns or controls 5% or more of the shares.

Contiguous: means adjacent to and touching at one point or more; if the lands are separated by an easement or a dedicated right-of-way, it shall be considered contiguous.

(3) **Recording**: Under special and unusual circumstances, where conditions so warrant as solely determined by the District (generally where sewer connections are not proposed), the District may issue the sewer permit without detention being provided for the entire area as part of the submittal and place a special condition on the permit that on-site detention will be provided for each future project within the area regardless of the area of the individual future project, provided that a Notice of Requirements for Storm Water Detention in connection with the permit issued by the District shall be recorded with the Cook County Registrar of Torrens Titles or the Recorder of Deeds of Cook County, as an encumbrance against the entire area.

Before such permit is issued by the District, the applicants shall furnish as part of the submittal, preliminary plans and design showing in adequate detail the manner in which the detention requirements will be satisfied by future projects within the area which is the subject of the permit. If, as part of the preliminary plans and design, it is proposed that the detention requirements will be satisfied by providing on-site detention facilities for individual future projects, the facilities shall be designed such that the minimum size of the area served by such facilities shall not be less than three (3) acres. The acres for which the detention facilities are designed shall be delineated on the preliminary plans. If individual lots having an area of less than three (3) acres each are proposed for development in the future, such lots shall be jointly developed so that the minimum area for which detention facilities are designed and provided shall not be less than three (3) acres. Individual projects developed within the area which is the subject of the permit shall conform to the preliminary plans made a part of the permit with respect to providing detention facilities to satisfy the detention requirements or provide alternate design meeting the intent of the preliminary plans and of the detention requirements as outlined herein.

Where only the name of the permittee appears on the permit application, the permittee shall furnish to the District as part

of the submittal an affidavit that the permittee is aware of the above requirements and will require any person connecting to the sewer which is the subject of the permit to comply with these requirements. Permits issued under the provisions of this article will contain a condition to the effect that the permittee will require any person connecting to the sewer to comply with the requirements contained herein.

6-5. **Correction of Existing Deficiencies in Separate Sewered Areas.**

It is recognized that the existing separate sanitary sewers within the District service area were designed and intended to receive and convey only domestic and industrial wastewaters together with a limited amount of groundwater infiltration. Stormwater runoff and excessive groundwater infiltration, however, have in many cases been entering and overloading sanitary sewers through deficiencies in the sewer systems such as open pipe joints, cracked or broken pipes, leaking manholes, and illegal connections (i.e., direct or indirect stormwater/groundwater connections to separate sanitary sewers). Sewer overloading arising from such deficiencies may cause health hazards, financial losses, and inconvenience to area residents. This occurs as a consequence of water pollution from the treatment plant bypasses and sewage overflows into streams, and also as a result of backups of sewage into buildings and onto streets and yards. Excessive extraneous clearwater flows also result in additional sewage treatment costs to the public. in order to remedy and prevent these problems, it is the intent of this Article to set forth a regionally applied program for the rehabilitation and correction of sanitary sewer systems, and for the establishment of adequate long-term sewer management programs by owners of separate sanitary sewers tributary to the District sewage treatment facilities.

a. **Scope and Goals.** The purpose of this program is the removal of groundwater infiltration and stormwater inflow (I/I) from separate sanitary sewer systems in order to meet the following goals:

(1) Prevention of water pollution.

(2) Elimination of basement sewage backups and other adverse sewer surcharging conditions that cause health hazards and financial losses.

b. **Applicability**. This Article applies to all tributary communities which own and/or operate a sanitary sewer system which discharges directly to the District system. As used herein, the term "tributary communities" shall include municipalities, townships, private utility companies, school and sanitary districts, and any other permittee or entity. Tributary communities which have been notified by the District as being in compliance with the District I/I removal requirements need not undertake another sewer rehabilitation program and are subject only to the requirement for the long-term maintenance and operation program as specified in Item h, below.

c. **Compliance Criteria.**

(1) Each tributary community shall undertake a program for removal of excessive I/I which meets all of the following criteria.

(a) Average daily wet weather flow in the tributary community's entire sanitary sewer system shall not exceed 150 gallons per capita per day, or optionally, documented water usage plus allowable

infiltration of 500 gallons per inch diameter-mile per day.

(b) Elimination of basement sewer backups and other adverse sewer surcharging conditions that cause health hazards and financial losses.

(2) Each tributary community has the option of undertaking the alternative I/I Corrective Action Program (ICAP), which meets all of the following criteria:

(a) The ICAP program shall be conducted pursuant to USEPA regulations/guidance (40 CFR 35.2120, Construction Grants 1985). All I/I that is determined to be excessive by an acceptable cost effectiveness analysis performed by the tributary community shall be eliminated. (Also, see item g, "Basin-by-Basin Analysis" below.)

(b) Completion of such additional work as may be required as a result of a Sewer System Compliance Conference provided for in Item g(2), below. The additional work may be required even after the elimination of the cost effective I/I. The cumulative effect on the basin of the remaining I/I from some of the tributary communities may continue to cause problems such as: raw sewage bypasses to local waterways, inadequate treatment at plants due to overloading, surcharging, and basement sewage backups. In some cases, one community's I/I may cause adverse effects on another community's ability to meet the goals set forth in this ordinance.

(c) In order to participate in the ICAP option, tributary communities must submit a formal resolution electing the ICAP option on or before March 1, 1986.

d. **Private Sources of I/I**. A program for the correction of private sources of I/I, which is compatible with the purpose of this Article and meeting the compliance criteria, shall be initiated under either program option selected in Item c above. Private sources are defined as cracked, broken or open-jointed building service laterals; and illegal connections such as, roof downspouts, storm sump pumps, area way drains, window well drains, exterior stairwell drains, patio, yard and driveway drains, and footing/foundation drains connected to the sanitary sewer system.

e. **Semi-annual Reports.** The District shall prepare and distribute semi-annual status reports regarding progress by the communities on their I/I identification and removal efforts. In order to complete this report, each tributary community shall submit to the District semi-annual reports of its progress and plans relative to its I/I identification and removal efforts. The first semi-annual report shall be submitted to District on or before July 1,1986. Reports must be submitted regardless of the degree of progress made during the reporting period.

f. **Compliance Schedule**. Each tributary community shall complete a series of work items in accordance with the time frames set forth below. The work items and schedule herein apply to both options set forth in Item C above unless otherwise indicated.

(1) Sewer System Evaluation.

(a) To the extent not already completed, each tributary community pursuing the District Compliance Criteria in Item C1, shall undertake a study and evaluation of its sewer system, and submit a completed evaluation study report to the

District by no later than January 1, 1987. The evaluation study shall be in conformance with the District "Guidelines for Sewer Rehabilitation and Elimination of Extraneous Flows," April, 1985. The work shall include flow measurements, physical survey of the system, and, if determined necessary, rainfall simulation (smoke testing and dyed water flooding), televising of sewers, and identification of private sector I/I sources. All studies must consider basement flooding, adverse surcharging, and private sector I/I.

(b) If the ICAP option is chosen (Item c(2)), a Sewer System Evaluation Survey (SSES) shall be conducted in accordance with USEPA regulations and guidelines by no later than January 1, 1987. A cost effectiveness analysis, prepared in accordance with Appendix A of 40 CFR Section 35 as of July 1,1984, shall be performed as part of the SSES report. The cost information for interceptors and sewage treatment facilities to be used in the cost effectiveness analysis shall be furnished by the District for the appropriate basins. Existing sewer and treatment capacity designed and intended for future population and development cannot, for the purpose of cost effectiveness analysis and planning, be used to accommodate excessive I/I. This existing capacity is necessary for the continuing economic growth and the vitality of the community which accrue by virtue of having adequate sanitary infrastructure available to serve future development. All sewer system evaluation studies shall be reviewed by the District, and the District shall, if necessary, provide the guidance required to achieve District approval.

(2) **Design.** Plans and specifications for the public sector corrective work necessary to eliminate the deficiencies identified in the above study shall be submitted to District as soon as possible, but no later than January 1, 1988. The plans for corrective work must include a timely and reasonable implementation schedule and appropriate funding arrangements. All designs, schedules and funding arrangements will be subject to review and approval by the District and, if necessary, by the IEPA.

(3) **Corrective Actions.** Corrective work necessary to eliminate the deficiencies that have been identified shall be started as soon as possible, but no later than July 1,1988. All corrective work must be completed in accordance with a reasonable schedule which establishes a final completion date and incorporates the private sector I/I removal program plan and long-term operation and maintenance program. The schedule will be based upon the nature of the corrective work to be performed and the funding mechanism to be utilized. The schedule will be formally codified in an enforceable manner.

(4) **Private Sector.** A program plan for the correction of private sector I/I sources shall be developed as soon as possible but no later than January 1, 1988.

g. **Basin-by-Basin Analysis.** Analysis of each sewage treatment basin shall be performed by the District as follows:

(1) After January 1, 1987, the District will conduct a basin-by-basin analysis of the potential, cumulative effect on the corrective actions, identified by the completed SSES as indicated in Item f(1) (a) and (b), above. This analysis will

utilize I/I removal projections to assess the impact on transport and treatment capacities and may identify continuing concerns relative to the goals in Item (a) above that will necessitate consideration of further corrective actions for particular basins or sub-basins which may apply to those tributary communities undertaking the ICAP (cost effectiveness) option.

(2) After July 1, 1988, the District will initiate action to address any continuing concerns identified in Item g (1), above. A 'Sewer System Compliance Conference' shall be convened which includes representatives of all the tributary communities identified as causing, contributing to, or being affected by the continuing concerns within each applicable basin. The IEPA and USEPA will also be invited.

Each conference will discuss the nature of the continuing concerns and formulate additional corrective actions and mitigation measures which may be required of tributary communities undertaking the ICAP cost effectiveness option. As soon as possible, but no later than one year after convening a conference, a final compliance program and schedule will be adopted by the District which will be applicable to the appropriate tributary communities after completion of the corrective work in Item f, above.

h. **Long-Term Operation and Maintenance Program.** All tributary communities (including communities presently in compliance) must establish a long-term operation and maintenance program with the aim of preventing entry of I/I into their sewer systems.

i. **Advisory Technical Panel.** An ICAP Technical Panel will be established by the District by January 1, 1986. This Panel will act in an advisory capacity and will be composed of appropriate elected officials and other representatives from the tributary communities, and the District. The Panel will be given the following duties and assignments:

(1) Develop, by March 1, 1986, recommendations regarding the components used to compute transport and treatment cost.

(2) Review and comment upon by March 1, 1986, flow metering criteria used to evaluate I/I.

(3) Develop by January 1, 1987 guidelines for the long-term operation and maintenance of sanitary sewer systems in the District service area.

(4) Review and comment upon the basin analyses prepared pursuant to Item g, above.

j. **Evaluation of Impacts from Residual Flow.** The District will plan for and initiate a special study of the impacts of "residual" I/I remaining in the separate sewer systems. This study will begin in the spring of 1987 and continue for the period of time necessary to adequately characterize the impacts in areas where corrective actions have been implemented. The results of this special study may be utilized for the Sewer System Compliance Conferences convened pursuant to Item g(2).

SECTION III—**SUBMITTAL REQUIREMENTS**

Article 7. **PROCEDURES FOR SUBMITTALS**.

7-1. **Documents to be submitted.** The applicant shall submit the documents listed below and prepared as indicated.

a. **Permit Form**. Submit the permit form in quadruplicate with all items complete. Provide all the signatures and seals necessary by the appropriate parties. Furnish all the information required or indicate non-applicability. Do not leave any blank spaces. Except for signatures and seals, all the information shall be typed.

b. **Overall Plan.** The plan shall clearly show and name all streets, buildings, sanitary and storm sewers, stub locations and method of capping, manholes, catch basins, curb inlets, watermains, surface water drainage and any other pertinent features or information. All manholes shall be clearly shown for all sanitary and storm sewers. Indicate the length and slope of all runs and show inverts at both ends. When the set of drawings submitted contains five (5) or more sheets, the overall plan shall be cross-referenced. A typical overall plan will be furnished upon request.

c. **Plot Plan.** When the project consists of one building, a plot plan on 8-1/2" x 11" will be accepted, provided the purpose and clarity of the drawing are not sacrificed. Otherwise use a standard size sheet, preferably 11" x 17" or 24" x 36". Give the location of the building service sewer with the length and slope. Give invert elevations at both ends, and any manhole rim elevations. Provide all of the other information described in Article 7-1b above. A typical plot plan will be furnished upon request.

d. **Location Map.** The location map shall be made to a scale compatible with clarity and purpose, but not smaller than 1/2" = 1000 ft. The site of the project shall be clearly identified. The map shall encompass an area surrounding the project site and extending approximately one mile in each direction. The map shall show the main streets or highways and/or section lines, labeled by name or number, so as to make them easily identifiable. Show the nearest interceptor and the nearest natural stream. Trace the entire route of the sanitary sewer to the point of connection to the District interceptor and label ownership of the sanitary sewer systems. Trace the entire route of the storm sewer from the site through existing storm sewer systems or drainage ditches to the point of discharge into the receiving stream. The location map will be waived if the municipality in which the project is located maintains an up-to-date sewer atlas, showing all the storm and sanitary sewer systems, and a copy of said atlas is furnished to the District by March 1 of each year. A typical location map will be furnished upon request.

e. **Construction Details and Other Data**. Submit drawings of construction details of special appurtenances, structures, connections and other relevant details. Submit additional information, statements and design data as may be required for specific types of projects.

7-2. **Consultation with the District.** The design engineer is encouraged to consult with the District in all instances to clarify any questions that he may have in connection with the permit and to insure adequacy and conformance of the drawings to the applicable requirements. In all cases which involve the design of treatment facilities, direct connection to the

District interceptors or facilities, and any project involving industrial waste, the design engineer should confer with the District prior to the preparation of the final plans. The transmittal letter submitting the plans must bear reference to prior consultations, if any.

7-3. **Plans.** Four copies of the plans no larger in size than 24" x 36", shall be submitted with the permit application. All plans shall show a "North" arrow, and shall be oriented so that the 'North' arrow points upward or to the right hand side of the drawing. When the set of drawings submitted contains five or more sheets, an index shall be provided on the title sheet of the set, if any, or on the over-all plan. Each sheet shall be designated by a proper title. The index sheet shall bear a date and shall show the name of the project and the name, address and telephone number of the design engineer. When the set of plans contains less than five sheets, and no index is provided, each sheet shall be identified independently and shall show the name of the project, the date, the sheet title, and the name, address and telephone number of the design engineer.

7-4. **Project and Plan Titles.** The engineer is urged to select precise and identifiable titles that would reveal or describe the nature of the project or the work encompassed on the sheet. A project title like "Three Story Building" or a sheet title like "Sanitary Sewer," is vague and unidentifiable.

7-5. **Specifications.** When specifications are prepared for the project, submit two copies of the specifications covering or relating to the sewer work. The specifications shall indicate the name of the project, and the name and address of the design engineer and shall contain a table of contents.

7-6. **Seals and Signatures**. The seal and signature referred to shall be those of the Professional Engineer responsible for the design. The seal shall be affixed on the title sheet and table of contents of the specifications, on the index sheet of the plans and on the location map. Where no index sheet is provided, the seal and signature shall be affixed on each sheet.

7-7. **The Illinois Professional Engineering Act**. The affixing of a Registered Professional Engineer's seal to any work which has not been done by, or under the personal supervision of, that Professional Engineer, is a violation of Section 28 of The Illinois Professional Engineering Act.

7-8. **Connection to Private Sewers.** When the proposed sewer connects to a private sewer, submit the written approval of the owner of the private sewer to which the connection is proposed, and a copy of the maintenance agreement.

Article 8. RESIDENTIAL AND NON-RESIDENTIAL PROJECTS.

8-1. **Trunks and Laterals.** When a permit application is made for the construction of trunk and/or lateral sewers to serve a future residential or non-residential project, submit the following:

a. Standard contract plans, profiles and specifications of the proposed sanitary sewer trunk and/or laterals.

b. Permit form, over-all plan, location map, and other data as may be required. (Article 7-1)

If the project includes construction of building service sewers, submit additional information as required for each specific project listed below. The requirements below may be incorporated in the plans described above.

8-2. **Residential Multi-Family Building.** When the project consists of, or includes, a building service sewer for a residential building containing 25 or more dwelling units, submit the following:

a. Permit form, plot plan, location map, construction details and other data as may be required. (Article 7-1)

b. Method of connection to sewer main. (See Article 4-4 and 4-5)

8-3. **Commercial Building.**

a. General. When the project consists of, or includes a building service sewer for a commercial building, submit the following:

1. Permit form, plot plan, location map, construction details, and other relevant data as may be required. (Article 7-1)

2. Method of connection to sewer main. (See Article 4-4 and 4-5)

3. Provide an inspection manhole on the building service sewer. (See Articie 4-6)

b. **Objectionable Wastes.** When the use of the building is such that it will produce objectionable or heavily-loaded discharges, (e.g. auto service garage), include the additional items below in the design: 1. Provide a triple basin or similar device and submit detail or manufacturer's catalog number of same. All non-domestic flow must go through the basin before entering the sewer main.

c. Less Objectionable Wastes. When the use of the building is such that less objectionable or heavily loaded discharges (e.g. from restaurants) are produced, submit the additional items below:

1. Provide a grease separator or similar device and submit detail manufacturer's catalog number of same. All non-domestic flow except the discharge from an automatic dishwasher must go through the separator before entering the sewer main.

d. **Specific Use**. Consult with the Local Sewer Systems Section of the District for building use classifications and specific requirements in each case.

8-4. **Industrial Building.**

a. **General.** When the project consists of, or includes, a building service sewer for an industrial building, submit the following:

1. Permit form, plot plan, location map, construction details, and other relevant data as may be required. (Article 7-1)

2. Method of connection to sewer main. (See Article 4-4 and4-5.)

3. Provide an inspection manhole on the building service sewer. (Article 4-6)

b. **Industrial Waste Potential.** When the use of the building does not involve processes or operations that will produce industrial wastes, (e.g. warehouse), submit the additional items below:

1. Provide a statement on the owner's stationery describing the use of the building and certifying tha no industrial waste will be allowed to discharge int the sewer system.

c. Industrial Waste Present. When the use of the building involves processes or operations that will produce industrial wastes (e.g. pickling plant), submit the additional items below:

1. A statement on the owner's stationery describing the use of the building and the processes used.

2. Indicate quantity, character and quality of industrial wastes produced. Indicate 5-day BOD, pH; suspended solids, etc. (See MWRD Sewer User Form)

3. Indicate type and location of treatment facilities proposed and the expected quality of the effluent. (See also Article 8-5)

4. Indicate method of controlling the quantity of discharge into the public sewer and times of discharge.

5. Indicate other wastes created but not discharged into the sewer and the method of disposal of same.

8-5. **Treatment Facilities**

Treatment facilities under this article: include by description and not enumeration, treatment processes, treatment plants, oxidation ponds and similar facilities. When the project involves, or consists of, treatment facilities submit the items indicated below. In all cases, the design engineer should consult with the District before the final design is completed:

a. Permit form, location map and other relevant data as may be required. (See Article 7-1)

b. Contract drawings.

c. Design criteria and calculations.

d. Required maintenance bond.

8-6. **Lift Stations.** Gravity sewers are by far preferable to Lift Stations and force mains as a means for conveying sewage. In general, lift stations are not desirable nor recommended and should be resorted to only after all other engineering studies for alternatives have been exhausted. Force mains should preferably be designed to discharge into gravity sewers. Discharge of force mains into another lift station is discouraged and is considered to be potentially detrimental to the health and welfare of the public served. Where a force main or a lift system is designed to discharge into another lift station a detailed report is required to justify such design. The report should include other methods considered, and the recommendation for the design must be supported by engineering considerations. Written approval of the Owner of the receiving lift station and a copy of the maintenance and operation agreement between the parties must be furnished. The agreement shall also clearly specify the responsibilities of the parties in case of failure of either lift station.

Where the project for which a permit application is made consists of, or involves a lift station and force main or lift system, submit the following:

a. Permit form, location map and other relevant data as may be required. (See Article 7-1)

b. Contract drawings.

c. Plan and profile of force main.

d. Design calculations and alternate power available. (Complete special District form for this purpose.)

e. Map of area to be served, clearly delineated.

SECTION IV - CONSTRUCTION, TESTING AND APPROVAL

Article 9. CONSTRUCTION AND INSPECTION

9-1. **Advance Notice.** Prior to commencement of sewer construction under the Permit, the Permittee shall give, or cause to be given, to the District, an advance notice of at least two (2) working days.

9-2. **Conformance to Plans and Specifications.** All construction shall be in accordance with the plans and specifications made part of the Permit. The permit together with a set of the plans and specifications for the project shall be kept on the job site at all times during construction, until final inspection and approval by the District.

9-3. **Construction Inspection**. All sewer construction shall be inspected and approved by a Registered Professional Engineer acting in behalf of the Permittee or the Owner of the project, or by the duly authorized representative of the Professional Engineer.

No sewer trenches shall be backfilled except as authorized by the Inspection Engineer after having inspected and approved the sewer installation. The Inspection Engineer shall signify his approval and authorization for backfilling on the Inspection Report. The Inspection Report shall be on the job site at all times, and shall bear the signature of the Engineer, identifying those portions of the sewer inspected and approved by him. The Inspection Report shall be made available for review by the District representative.

9-4. **Record Drawings.** Within sixty (60) days after final inspection and approval by the District, the Permittee shall furnish or cause to be furnished to the District, a set of record drawings. The pipe and joint materials and applicable ASTM Specifications shall be indicated on the drawings.

Article 10. TESTING AND APPROVAL.

10.1. **Requirement for Testing.** Ail sewers constructed under permits issued by the District shall be subject to inspection, testing and approval by the District to insure compliance with the applicable requirements. All testing shall be made, or caused to be made, by the Permittee or Co-Permittee at no cost to the District and in the presence of the District Representative.

a. Testing procedures for polyvinyl chloride (PVC) pipe shall include the following:

1. The project engineer shall randomly select portions of the project to be deflection tested. Such portions shall consist of the manhole intervals for the initial sewer construction up to 1,200 linear feet and not less than 10% of the remainder of the sewer project.

2. The 5% deflection test for pipe sizes six (6) to fifteen (15) inches in diameter is to be run using a nine-arm mandrel having a diameter equal to 95% of the base diameter of the pipe as established in ASTM D-3034. For pipe sizes eighteen (18) to twenty-seven (27) inches diameter, the nine-arm mandrel size shall be 95% of the inside diameter and wall thickness dimensions shown in Table 1 of ASTM F-679, latest issue. The test shall be performed without mechanical pulling devices.

3. The individual lines to be tested shall be so tested no sooner than 30 days after they have been installed.

4. Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

5. No pipe shall exceed a deflection of 5%.

6. In the event that the deflection exceeds the 5% limit in 10% or more of the manhole intervals tested, the total sewer project shall be tested.

7. Where deflection is found to be in excess of 5% of the original pipe diameter, the contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. If, after the second test, the deflected pipe fails to return to the original size (inside diameter) the line shall be replaced.

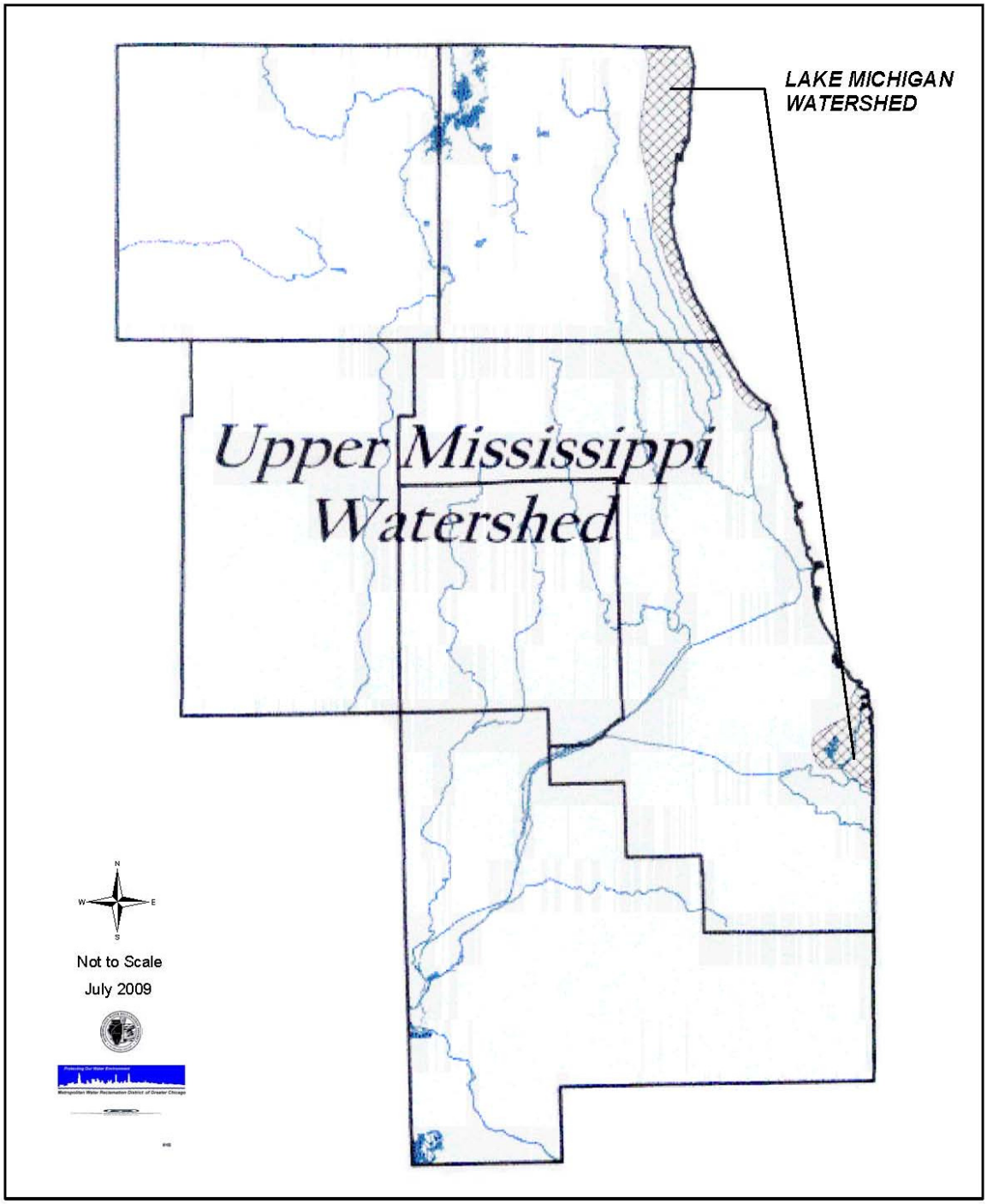
10-2. **Request for Final Inspection.** Upon completion of construction, the Permittee shall submit to the District a properly executed request for final inspection and approval on the form prescribed by the District. No sewer shall be put in service until it has been approved by the District, and until all the conditions of the permit have been satisfactorily met.

10-3. **Construction Without Advance Notice.** Construction without advance notice to the District, as provided in Article 9-1, shall be considered prima facie evidence that construction may not have been done in accordance with the applicable requirements. In addition to any other requirements, that portion of the newer construction prior to the notification of the District shall be exposed by the owner, at his expense in at least one location between every two manholes, two terminal points or as directed by the District for visual inspection by the District to insure compliance with applicable requirements as to materials and workmanship.

10-4. **Maximum Allowable Infiltration**. It is the intent of the District that all sewers within its territorial boundaries shall be constructed of sound material and shall be properly jointed so that the amount of ground water infiltration into the sewer shall be kept at a minimum. The maximum allowable rate of infiltration or exfiltration shall not exceed 100 gallons per twenty-four (24) hours per mile per inch-diameter of the sewer pipe, for any section of the system and at any time during its service life.

APPENDIX D

U.S. Army Corps of Engineers
Watershed Service Areas



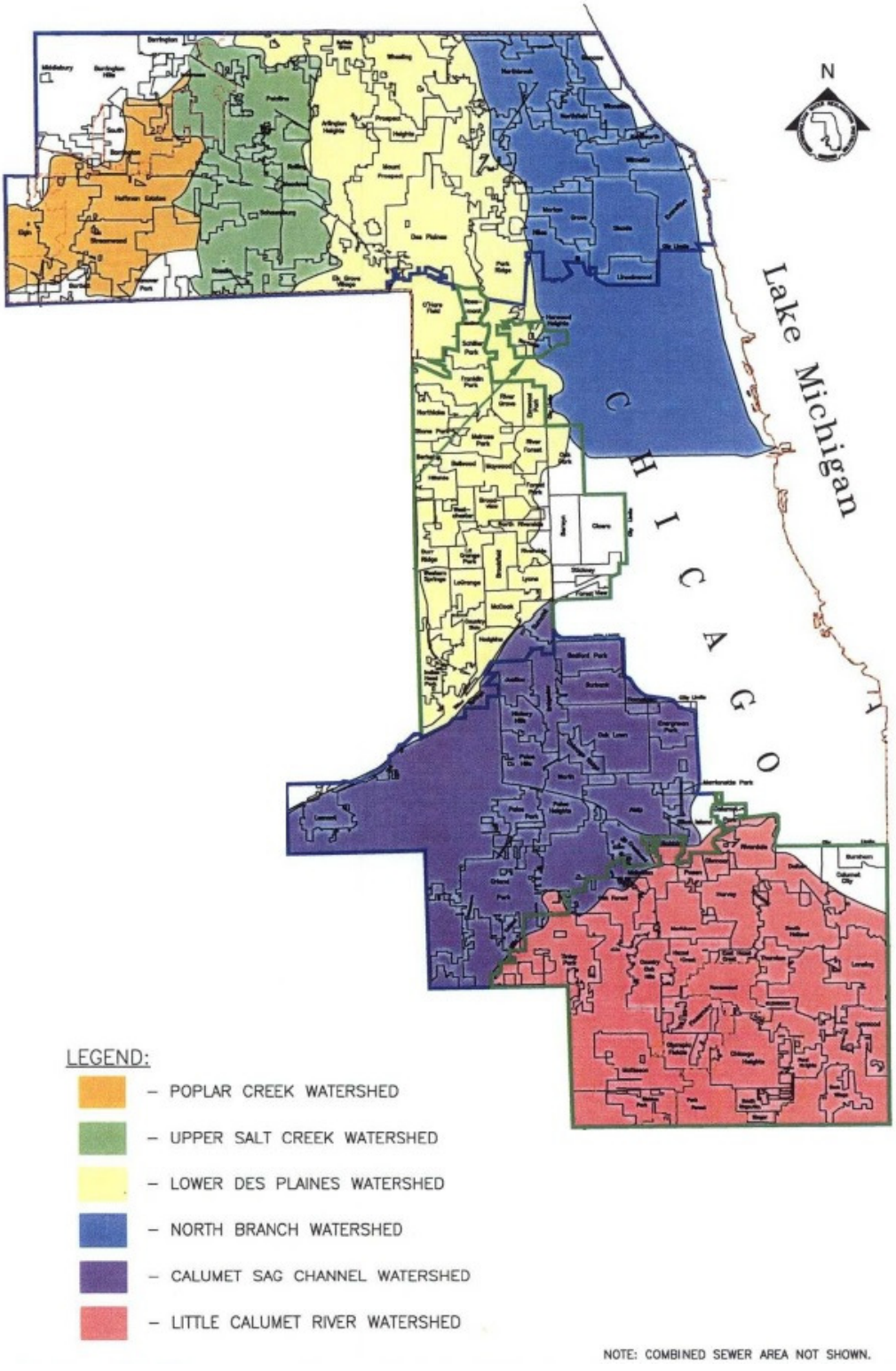
APPENDIX D
US ARMY CORP OF ENGINEERS
WATERSHED SERVICES AREAS

Source: US Army Corps of Engineers, Chicago District

APPENDIX E

Watershed Planning Areas

Watershed Planning Areas



APPENDIX F. PERMIT FEES
TO THE WATERSHED MANAGEMENT ORDINANCE

WATERSHED MANAGEMENT PERMIT FEE SCHEDULE ***(Authorized Municipality permits are subject to the fees instituted by the municipality. Only the* Section IV. Sanitary Sewer Construction *and* Schedule O *WMO fees below apply)***	**Total Fee $**
SECTION I. NON-REFUNDABLE BASE PERMIT FEES (Does not include Section II, III, IV, and V of this form)	
(A) Watershed Management Permit	$1,100
(B) Earthwork/Foundation Limited Permit	$2,100
(C) Notification and Request For Inspection (NRI)	$250
(D) Facility Connection Authorization (within City of Chicago)	$1,000
(E) Permit Revision	$500
SECTION II. STORMWATER DETENTION	
(A) Small Development - Residential ≤ 10 acres & Non-Residential ≤ 5 acres (Nomograph)	$500
(B) Small Development - Residential ≤ 10 acres & Non-Residential ≤ 5 acres (Model)	$1,500
(C) Large Development - Residential > 10 acres & Non-Residential > 5 acres (Nomograph)	$1,000
(D) Large Development - Residential > 10 acres & Non-Residential > 5 acres (Model)	$3,000
SECTION III. ISOLATED WETLANDS/RIPARIAN ENVIRONMENTS	
(A) Verification of Isolated Wetland Boundary, Classification and Buffer	$250
(B) Isolated Wetland Impact < 0.10 Acre or Riparian Environment without Mitigation	$500
(C) Isolated Wetland Impact ≥ 0.10 Acre or Riparian Environment with Mitigation Plan	$2,500
SECTION IV. SANITARY SEWER CONSTRUCTION	
(A) Sewer Inspection Fee	$5 Per LF of Sewer
(B) Lift Station and/or Forcemain (Schedule E)	$250
(C) Connection Impact Fee	
(1) Low Density and/or Medium Density Residential (20 Units/Acre or Less)	$3,750/Acre
(2) High Density Residential (21 Units/Acre or More)	$6,000/Acre
(3) Commercial or Industrial	$7,500/Acre
SECTION V. OTHER FEES	
(A) Recordation Deposit	$500
(B) Inspections for Violations	$250 Per Inspection
(C) Hazard Areas (Floodplain/Floodway/Riparian Environment - Schedule H)	$250
(D) Outfalls/Direct Connections to District Facilities/Impacts to District Property (Schedule O)	$250
(E) Notice of Requirements of Stormwater Detention (Schedule L)	$250
(F) Resubmittals	$0
(G) Variances (Filing and Review Fee)	$2,000

Note: Single-family home developments are exempt from fees, excluding projects involving wetlands/riparian and/or public sewer extensions

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APPENDIX G. EXISTING INTERGOVERNMENTAL AGREEMENTS

The intergovernmental agreements referenced in §500.7 of this **Ordinance** include, but are not limited to, all of the following:

1. Agreement by and between the Metropolitan Sanitary District of Greater Chicago and the Villages of Westchester and Hillside, dated February 10, 1972 and commonly known as the Westchester and Hillside Agreement;

2. Agreement by and between the Society of the Divine Word, Missionary Sisters Servants of the Holy Spirit, and Metropolitan Sanitary District of Greater Chicago, dated August 17, 1975 and commonly known as the Techny Agreement; and

3. Intergovernmental Agreement for Acquisition, Design, Construction, Use, Operation and Maintenance of Stormwater and Recreational Improvements at Heritage Park, dated April 1, 2010 and commonly known as the Heritage Park Flood Control Facility Agreement.

4. Intergovernmental Agreement by and between the Village of Flossmoor, Homewood Flossmoor High School District 233, and the Metropolitan Water Reclamation District of Greater Chicago for Construction and Perpetual Maintenance of the Cherry Creek East Branch Flood Control Project in Flossmoor, Illinois.

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