



# Watershed Management Ordinance

## **2017 Amendment**

Study Session  
October 5, 2017



# Agenda

- WMO Background
- Public Comments
- Clarifications to align with administrative procedures
- Noteworthy changes to the WMO
  - *Volume Control Trading*
  - *Future Volume Control*
  - *New Permit Type*



# WMO Background

- 2004: Public Act 093-1049
  - *MWRDGC is the stormwater authority for Cook County*
- 2007-2013: Development and Public Review
  - *Technical Advisory Committee*
  - *Public Comments*
  - *Economic Impact Study*
  - *Re-draft*
- October 2013: Adoption
  - *Officially adopted by Board of Commissioners*
- May 1, 2014: Effective Date
  - *WMO became effective for Cook County*
  - *Projects on Existing Development Plans List (EDPL) were exempt for one year*
- July 10, 2014: Amendment
  - *Infiltration/Inflow Control Program (Article 8) was added*
- May 1, 2015: EDPL Expired
  - *All development now subject to WMO*
- **2016-2017: Development of Proposed Amendment**





# Public Comment Period

Public Comment period held November 7, 2016 through March 31, 2017

- Draft Amendment posted on WMO website ([wmo.mwrd.org](http://wmo.mwrd.org))
- 91 individual comments received from 16 unique entities
- Response letters sent
- Comments incorporated into Final Amendment
- Final Amendment presented to Board of Commissioners





# Public Comments

## Qualified Sewer Construction and Outfalls:

Outfalls should not exempt drains less than 12-inches

Staff Recommendation:

Definition modified to exempt only private single-family home drains

## Redevelopment:

Compliance is difficult for redevelopment of outlots

Staff Recommendation:

Redevelopment provisions exist to assist in these situations



# Public Comments

## Volume Control:

Request to impose quantifiable standards for flow-through practices

Staff Recommendation:

Measuring quantifiable results from practices such as filter strips are nearly impossible

Using detention in lieu of retention for parcels with site constraints

Staff Recommendation:

Only allowed for sites with constraints tributary to combined sewer

Volume control should increase if wetlands are present

Staff Recommendation:

Wetlands are protected in the WMO, regardless of stormwater requirements



# Public Comments

## Floodplain:

Development within the floodplain should be prohibited

### Staff Recommendation:

Floodplain development requires mitigation and must meet state and federal standards

## Wetlands:

Suggestion for District to require buffers for Corp jurisdictional wetlands

### Staff Recommendation:

WMO does not have jurisdiction over Corps wetlands



# Public Comments

## Authorized Municipality Comments:

Authorized Municipalities should have more autonomy

Staff Recommendation:

Administrative policies will be reviewed and revised as necessary

Authorized Municipalities should be able to issue permits with qualified sewer construction

Staff Recommendation:

The District should continue to review all sewer construction tributary to our facilities



# Public Comments

## General Comment:

District projects should not be exempt from the WMO

## Staff Recommendation:

District projects include activities that are already exempt or have not historically required permits (sewer construction, treatment plant improvements, etc.)

## Additional Comments:

- Forest Preserve District Language
- Offsite/Future Volume Control
- New Earthwork Permit



# Public Comments

## Support Expressed:

Exempting mitigation when impact is less than 0.10 acre

Exempting volume control when impervious area is less than 0.10 acre

Keeping offsite volume control within the same subwatershed

Increasing accessory structure from 500 SF to 750 SF

## Staff Recommendation:

Changes are recommended to the Board as originally proposed



# Proposed WMO Changes

Over 75 edits to formatting, typographical errors, and references

**No changes** to the following sections:

- Article 1 – Authority and Purpose
- Article 4 – Requirements for Erosion and Sediment Control
- Article 8 – Infiltration/Inflow Control Program
- Article 11 – Variances
- Article 12 – Prohibited Acts, Enforcement, and Penalties
- Article 13 – Appeals
- Appendix B – Watershed Specific Release Rates
- Appendix D – U.S. Army Corps of Engineers Watershed Service Areas
- Appendix E – Watershed Planning Areas





# Proposed WMO Changes

## CLARIFICATIONS TO ALIGN WITH



## ADMINISTRATIVE PROCEDURES



# Proposed WMO Changes

- Article 2 – Applicability and General Provisions:
  - Delete reference to the Existing Development Plans List (EDPL) in § 200.4.F – *The EDPL deadline expired May 1, 2015, and is no longer a valid part of the WMO*
  - Move agriculture exemption from § 201.1.D(1) to § 200.4.A – *Agriculture is always exempt from the WMO, not just when certain development thresholds are met*
  - Language Clarifications
    - *Flood control and state projects still require permit for qualified sewer and District Impacts*
    - *Require permits to protect residential buildings from flooding*
    - *Rights-of-way are “public” and non-sewer utility work is exempt, even if related to development*
    - *“Existing detention” not required by MWRD is subject to WMO regulation only if seeking credit toward redevelopment provisions of § 505*
    - *Define “modifications” as changes to detention facility outlet structure or storage volume*
    - *Multi-County Municipality Program – permits are not required for modifications to detention facilities, which follow the other county’s ordinance*



# Proposed WMO Changes

## Forest Preserve District Language

- **§ 300.5** – *Modify language regarding Forest Preserve District review for stormwater impacts from projects adjacent to or directly impacting their property*

- Previous language referenced a non-existent stormwater policy
- Public comments indicated proposed language required additional clarification
- § 300.5 modified to incorporate public comments:

*Co-permittees proposing runoff at a location on or adjacent to holdings or property of the 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.*

- Additional guidance has been created and will be provided in the TGM



# Proposed WMO Changes

- Article 3 – Permit Requirements and Submittals:
  - **§ 300.6** – *Add language about limitations of permits, and modify title in § 300*
  - **Replace “township” with “Cook County” in § 301.1.B and § 308.9.H** – *Cook County is the regulating authority for development in unincorporated areas*
  - **§ 301 Schedule K is not always required** – *Only when ownership interest is less than stormwater thresholds listed in Article 5, Table 2*
  - **Language Clarifications:**
    - *Stormwater portions of projects may qualify for non-Sole Permittee status, even if qualified sewer construction is proposed*
    - *Co-Permittee is responsible for recording Schedule R*
    - *Maintenance is required for compensatory storage and volume control*
    - *Volume control and qualified sewer also require record drawings*
    - *Language regarding the permit fee refund policy is added*



# Proposed WMO Changes

- Article 5 – Runoff and Volume Control:
  - **§ 502.8** – *Minor stormwater systems do not require an easement*
  - **§ 503.2** – *Volume control is required when impervious area is greater than 0.10 acre, and shall be provided where practicable when less than 0.10 acre*
  - **§ 503.3.C** – *To apply for reduction in volume control, must demonstrate that offsite volume control practices are not available*
- **Language Clarifications:**
  - *Refer to Article 7 regarding underdrains in the Combined Sewer Area*
  - *Volume control must be located outside the regulatory floodway*





# Proposed WMO Changes

- Article 5 – Requirements for Stormwater Management:
  - **Detention Language Clarifications:**
    - *Indicates allowable release rate must meet tailwater conditions if in the floodplain*
    - *Maintenance agreement is required for offsite detention, not all detention*
    - *For detention facilities located within the floodplain, the nearby effective “BFE” is by elevation, not delineation*
    - *Runoff requirements must also be met for offsite detention*
    - *For offsite detention, volume control may also be located offsite as long as requirements are met through retention based practices*
    - *“Encumber” means recorded with Cook County Recorder of Deeds*
    - *Detention “shall” be in service prior to occupancy, to be consistent with Special Conditions*
    - *Road construction clarified to mean “impervious paving”*



# Proposed WMO Changes

- Article 6 – Requirements for Flood Protection Areas:

- **Clarifications for Floodplains/Floodway**

- *Elevation requirements to protect structures in proximity to floodplains*
- *Protections include residential buildings within 100-feet of the floodplain*
- *Setback may be met using FEMA Technical Bulletin 10-01*
- *Local NFIP regulation sets elevation standard for accessory structures*
- *Specifications for fill used to elevate a building above the FPE*
- *Volume control is prohibited in the regulatory floodway*
- *Construction approved by IDNR-OWR is considered an acceptable use within the regulatory floodway*



# Proposed WMO Changes

- Article 6 – Requirements for Flood Protection Areas:

- **Clarifications for Wetlands/Riparian Environments:**

- *Provide direction for offsite wetlands that are unable to obtain a Corps jurisdiction – assume high-quality isolated wetland*
- *Remove mitigation requirement from the section indicating mitigation is not required for impacts less than 0.10 acre*
- *Exempt 0.10 acre of riparian area for mitigation, same as wetlands*

- **Outfall requirements to Lake Michigan § 608** – *Include existing TGM language indicating water quality devices are required for new or reconstructed outfalls to Lake Michigan*



# Proposed WMO Changes

- Article 7 – Requirements for Sewer Construction:
  - **Insert protections language (similar to Articles 5 and 6) into § 700.5** – *Sewer construction shall not cause any detrimental effects*
  - **Exempt underdrains for green infrastructure in § 701.2.H** – *The WMO encourages the use of green infrastructure, and does not intend to regulate the underdrains as qualified sewer construction*
- Article 9 – Maintenance:
  - **Modify § 901 to include all facilities** – *The WMO requires maintenance for more than just qualified sewer construction*
  - **Create new section § 902** – *Maintenance requirements for stormwater facilities which have no Permittee (unincorporated areas)*
- Article 10 – Inspections:
  - **§ 1000.3** – *Add “in its jurisdiction” for authorized municipality inspection scope*





# Proposed WMO Changes

- Article 14 – Administration:
  - **§ 1401.3-4** – *New language regarding cancellation and fee refund policy*
  - **Authorized Municipality Administration Clarifications**
    - *Authorized Municipality shall follow its own cancellation and fee refund policies*
    - *Records shall be transmitted upon request, not receipt*
    - *Authorized Municipalities shall ensure inspection of volume control, as they have administrative jurisdiction over the WMO within their municipal boundary*
  - *Authorized Municipalities may issue permits with § 201.2 scope, but not until receiving approval from the District*





# Proposed WMO Changes

- Appendix A - Definitions

- **Accessory Structure** – *Increase the acceptable area from 500 sf to 750 sf*

- **New Definition: 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.*

- **Development** – *Add “demolition” to list of activities that are not development*
- **Outfall** – *Add “Outfalls do not include private single-family home drains”*
- **Satellite Entity** – *Homeowner associations and mobile home parks do not own and/or operate public sewer systems, and should not be considered satellite entities*
- **Substantial Improvement** – *Indicate this is determined by the local NFIP regulation*
- **Waterway** – *Add the term “channel” as a qualified water body*



# Proposed WMO Changes

- Appendix C – SPO and Manual of Procedures:
  - **Modify title to remove reference to the EDPL**
- Appendix F – Permit Fees:
  - **Add note indicating AM's set their own fees and which fees apply for AM permits**
- Appendix G – Existing Intergovernmental Agreements:
  - **Add IGA with Flossmoor and Homewood/Flossmoor High School District 233**



# Proposed WMO Changes

## NOTEWORTHY CHANGES



## TO THE WMO



# Volume Control Trading

## Concept

Allowing a municipality or private owner to create an exchange within their community to trade constructed volume control credits towards new development that would otherwise need onsite volume control.

## Guidelines:

- Similar to offsite detention facility
- Only allowed for demonstrated site constraints
- Provide for 1-inch over impervious area of development
- VC Trading facility must be permitted and inspected by MWRD
- VC Trading facility must exist or be permitted before development is approved
- Provide a maintenance agreement between all owners with interest in the offsite volume control practice(s)
- Site seeking credits must provide flow through device for water quality (tributary to a waterway) or detention (tributary to a combined sewer)
- VC Trading only allowed within boundaries of the same sub-watershed





# Subwatersheds in Cook County

## Six (6) Watersheds:

- North Branch of the Chicago River
- Poplar Creek
- Upper Salt Creek
- Lower Des Plaines
- Cal Sag
- Little Calumet

106 Subwatersheds



### Legend

-  Cal Sag Watershed
-  Subwatersheds



# Volume Control Trading

- Appendix A – New Definitions relating to VC Trading

## *Offsite Volume Control Practice*

*Permanent practices designed to capture, retain, and infiltrate stormwater runoff from impervious areas of a development located elsewhere in the subwatershed.*

## *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.*



# Future Volume Control

## Guidelines:

- Similar to detention
- Build-out for anticipated future development
- Provide a concept plan with permit submittal
- Future development will be subject to regulations in place at the time of future permit application submittal
- If excess volume control is not sufficient to meet the actual future scenario, additional volume control will be required





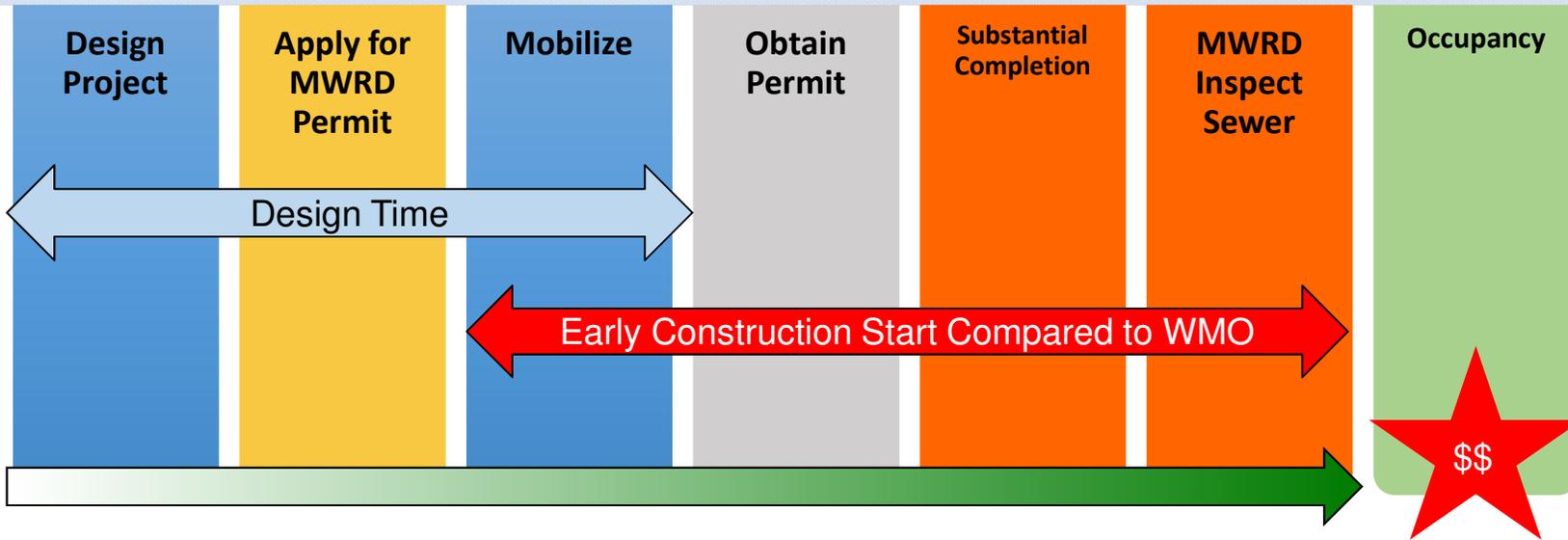
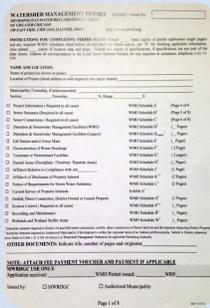
# Earthwork/Foundation Limited Permit

- Similar concept to municipal foundation permits
- Beneficial for projects with unique timelines, such as:
  - Schools
  - Earthwork required prior to winter freeze
  - Tight schedule to keep grant funding
- Provides for early engagement with design engineers
- Village guarantees work by signing permit form



# Earthwork/Foundation Limited Permit

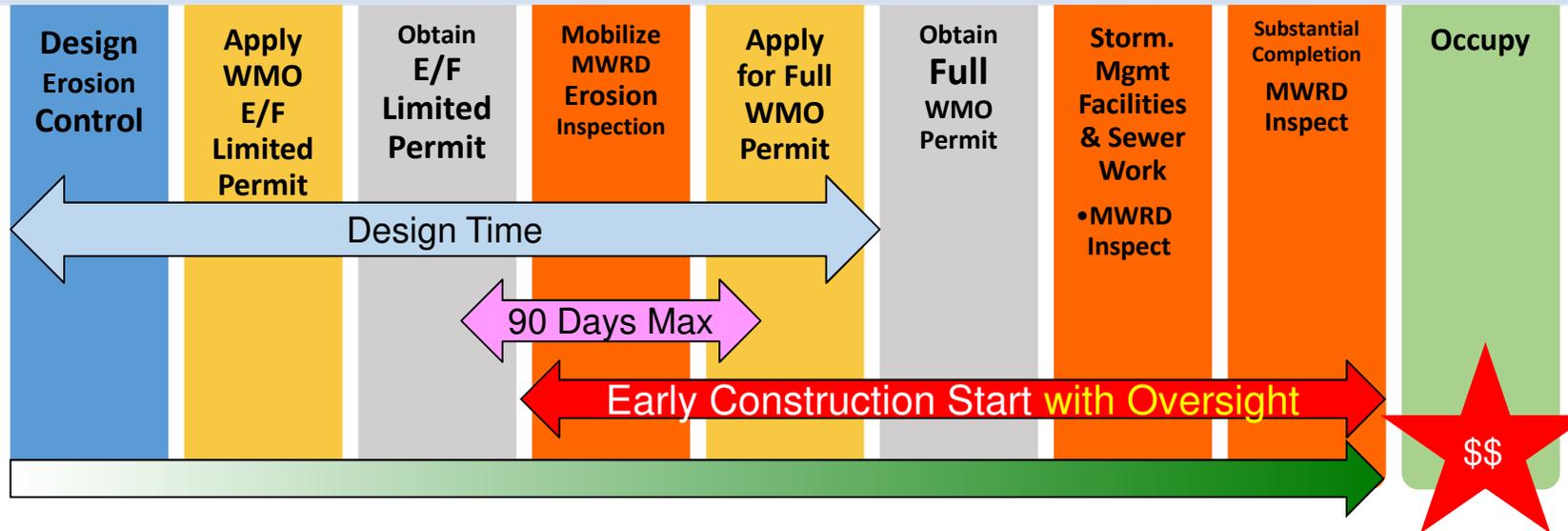
## Contractor Expectations with MWRD Involvement in Project Based on Legacy Relationship





# Earthwork/Foundation Limited Permit

With New E/F Permit = Early Oversight and Intervention  
Avoiding Construction Schedule Complication in Winter Climate





# Earthwork/Foundation Limited Permit

Allows for expedited review of grading or limited foundation work prior to issuance of full WMO permit.

Watershed Management Permit No.

**EARTHWORK/FOUNDATION LIMITED PERMIT  
WATERSHED MANAGEMENT ORDINANCE**

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO  
111 EAST ERIE STREET, CHICAGO, ILLINOIS 60611  
312-751-3255

**1. PROJECT INFORMATION**  
Project Name: \_\_\_\_\_  
Description of Project: \_\_\_\_\_  
Street Address of Project: \_\_\_\_\_  
Municipality (Township, if unincorporated): \_\_\_\_\_  
Consulting Engineer: \_\_\_\_\_  
Related MWRD Sewer Permit and/or Watershed Management Permit Number, if known: \_\_\_\_\_  
Parcel Area: \_\_\_\_\_ acres      Temporary Disturbance Area: \_\_\_\_\_ acres  
Project consists of:    Earthwork Only    Earthwork and Foundation Installation    Floodplain Onsite (see No. 3)

**2. APPLICABILITY:** This form may be used for limited earthwork, soil and erosion control installation, and foundation/building placement related to a development which requires a full Watershed Management (WMO) permit. The purpose of this limited permit is to allow disturbance on-site to begin prior to final approval of the corresponding WMO permit. Any work is considered "at risk" until issuance of a full WMO permit.

*The following are prohibited for use under this form:*  
(1) qualified sewer construction, (2) development in the floodplain, (3) potential wetland/riparian located on-site, (4) volume control, (5) detention facilities, (6) outfalls to waterways, and (7) District Impacts (see §201.2.C-G).

**3. INSTRUCTIONS FOR FILING FORMS:** Submit two copies of this permit application with WMO Schedule P and Schedule D, Schedule H (as applicable), corresponding plans and drawings, and a narrative describing the limits of construction. A full WMO permit must be submitted either concurrently or within ninety (90) days of issuance of this permit. Notify MWRD field office (telephone (708) 583-4055) or the Authorized Municipality prior to commencing any construction activities. Failure to give advance notice and make written submittal as required constitutes a violation of the Watershed Management Ordinance.

**4. REQUIREMENT OF NO ADVERSE IMPACT:**  Schedule D attached  
Proposed work shall not create an adverse impact to any other properties. Mitigation of adverse impact caused by increased runoff shall be provided in a zero-release basin designed using the monograph method for detention. The basin shall provide temporary storage for development activities proposed under this permit. No associated sewer shall be installed as part of the temporary basin, and the temporary basin shall be functional prior to any foundation installation. Volume control is not provided for purposes of this limited permit, but must be provided under the corresponding full WMO permit.

**5. FLOODPLAIN ON-SITE:**  Schedule H attached  
No work is allowed in the floodplain under this permit. A full WMO permit is required prior to conducting any work within the designated floodplain area. Prior to commencing earthwork on the site, the floodplain must be designated in the field, per the delineation shown on the erosion control plan. For any proposed foundations, the lowest floor elevation and lowest point of entry for must conform to the WMO regulations (§602).

**6. WETLAND / RIPARIAN ON-SITE:** Potential wetland or riparian environment on-site:  Yes  No  
A full WMO permit is required prior to conducting any work on a site in which a wetland or riparian environment is present. This permit form shall not be used if there may potentially be a wetland or riparian environment located on the site, which requires determination by a certified wetland specialist. By checking "No" above, the Engineer certifies that no potential wetland or riparian environment exists.

**7. EXPIRATION:** This limited permit will expire if the full WMO permit for the remaining development is not submitted to the MWRD Local Sewer Systems Section within ninety (90) days of the date of issuance of the limited permit below. If the full WMO permit is received on or before the ninety (90) day deadline, then this limited permit is valid for one year from date of issuance. Any construction activity occurring beyond the expiration date will be deemed construction without a permit and applicant may be subject to enforcement and penalties set forth in Article 12 of the WMO. If conditions so warrant, an extension of this limited permit may be granted. The development activities covered under this permit will continue to require conformance with all provisions of the WMO until the RFI for the associated full WMO permit has been issued.

**8. REVOCATION:** In issuing this limited permit, the MWRD has relied upon the statements and representations made by the Applicant or his/her agent. Any incorrect statements or misrepresentations will be cause for revocation of this limited permit, and this limited permit will immediately expire. No fees remitted to the District will be returned.

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**9. PERMIT FEES:** One-time fee of \$2,100.00 includes permit review and site inspections conducted under this permit only.

**10. SPECIAL CONDITIONS:** This permit is subject to the attached special conditions.

**11. CERTIFICATION BY PROFESSIONAL ENGINEER**  
This application and the drawings, together with other submittals made a part of this application, have been examined by me and are found to be in compliance with all applicable regulations contained within the Watershed Management Ordinance.  
Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Engineering Firm: \_\_\_\_\_  
Address: \_\_\_\_\_ Zip: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Phone: \_\_\_\_\_

**12. PERMITTEE RESPONSIBILITY:** The Permittee warrants that in such case as the Co-Permittee fails to meet full WMO compliance, or if a full WMO permit is not received within ninety (90) days, the Permittee will be responsible for taking action to ensure the site meets the full stormwater and flood protection standards of the WMO for all work completed.

**13. PERMITTEE (MUNICIPALITY)**  
Municipality: \_\_\_\_\_  
Address: \_\_\_\_\_  
Zip: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_ Phone: \_\_\_\_\_

**14. CO-PERMITTEE (PROPERTY OWNER)**  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Zip: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_ Phone: \_\_\_\_\_

**FOR USE ONLY BY:  MWRD OR  AUTHORIZED MUNICIPALITY**

Approved by: \_\_\_\_\_ Date Issued: \_\_\_\_\_

-----INSPECTION REPORT: (FOR MWRD OR AUTHORIZED MUNICIPALITY USE ONLY)-----

**1. TIME SCHEDULE:** (a) Verbal telephone notice received \_\_\_\_\_ (b) Final inspection date \_\_\_\_\_

**2. INSPECTION:**  
(a) Site meets all requirements of the SESC Inspection report:  Yes  No  
(b) Earthwork/grading is per plan:  Yes  No  
(c) Construction is restricted to approved activities only:  Yes  No  
(d) Temporary detention facilities constructed per plan:  Yes  No

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

-----APPROVAL BY MWRD OR AUTHORIZED MUNICIPALITY-----

The project has been inspected and is hereby approved.

Date: \_\_\_\_\_ Inspector \_\_\_\_\_ MWRD Area Engineer/Field Supervisor or Authorized Municipality Enforcement Officer \_\_\_\_\_

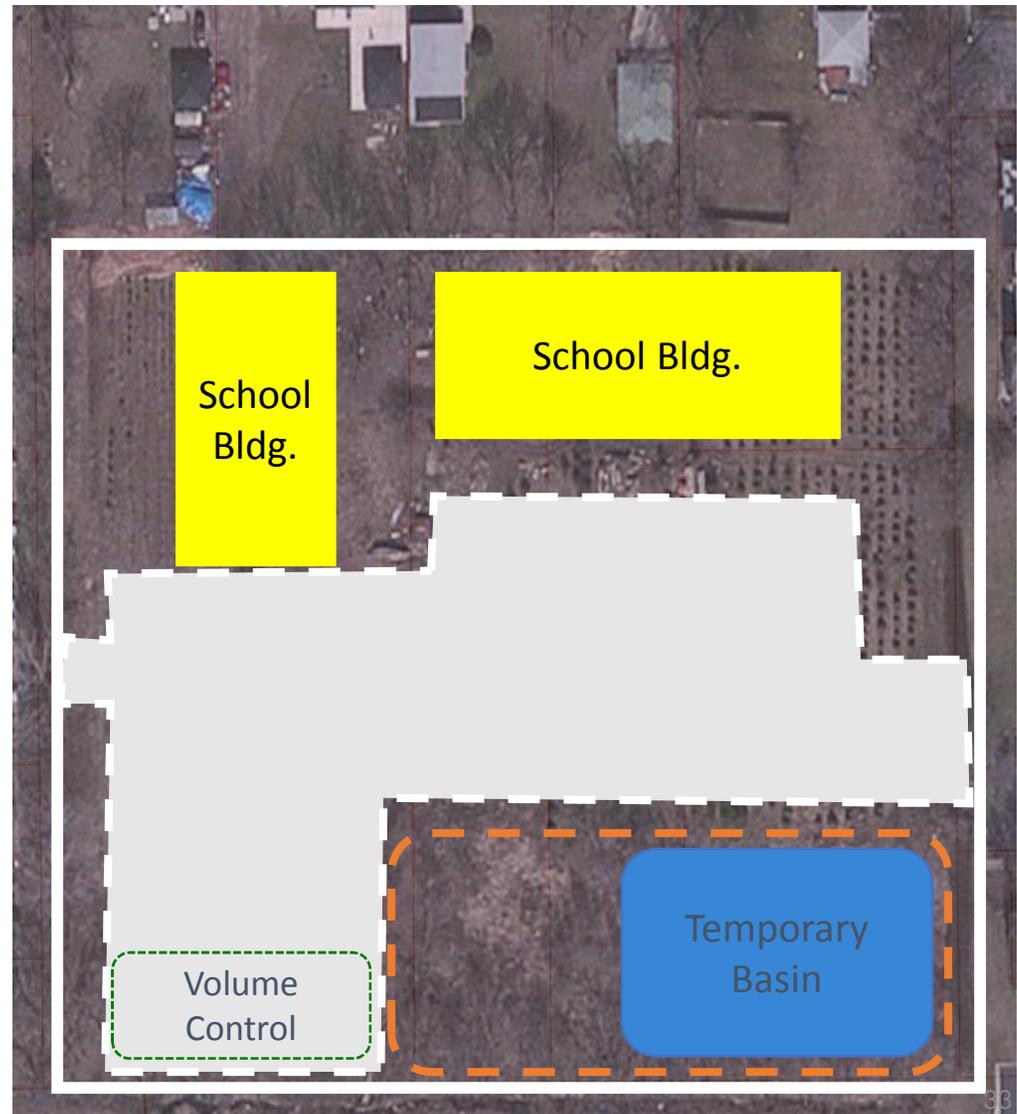
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# Earthwork/Foundation Limited Permit

## Example

- Total Site: 4.5 acres
- Two school buildings, parking lot, volume control and detention pond
- Permit to start grading and foundation work (*yellow area*)
- Temporary basin required to mitigate any adverse impact (*blue area*)
- Volume control design provided in later permit (*green dashed area*)

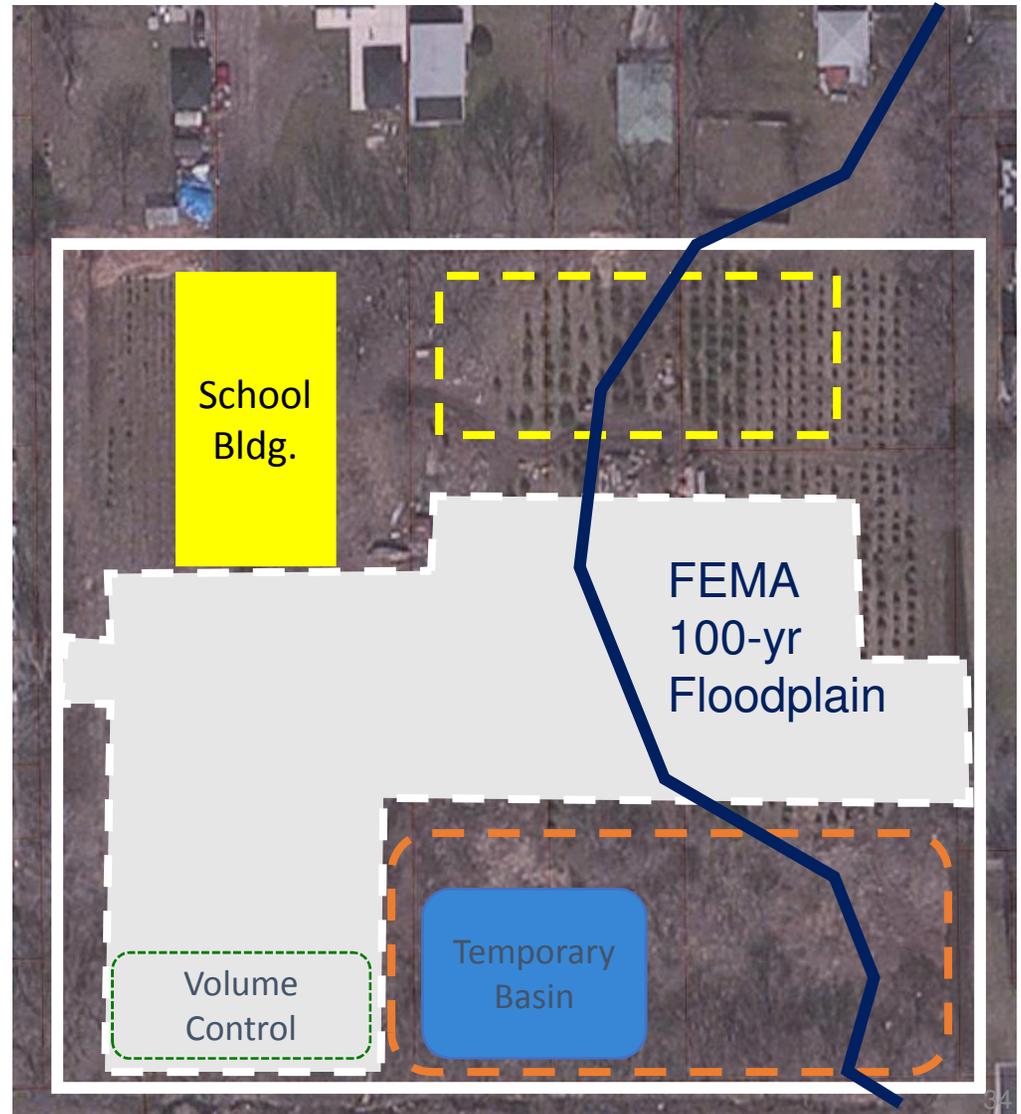




# Earthwork/Foundation Limited Permit

## Example (w/floodplain)

- Total Site: 4.5 acres
- Two school buildings, parking lot, volume control, and detention pond
- Permit to start grading and foundation work (*yellow area*)
- **No work allowed in floodplain**
- **No work on site with potential wetland or riparian environment**
- Temporary basin required to mitigate any adverse impact (*blue area*)
- Volume Control design provided in later permit (*green dashed area*)





# Revised WMO Fee Schedule

Appendix F: Permit Fees – Add new Earthwork/Foundation Limited Permit base fee

## APPENDIX F. PERMIT FEES TO THE WATERSHED MANAGEMENT ORDINANCE

<b>WATERSHED MANAGEMENT PERMIT FEE SCHEDULE</b> <i><u>(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)</u></i>	Total Fee \$
SECTION I. <u>NON-REFUNDABLE</u> BASE PERMIT FEES (Does not include Section II, III, IV, and V of this form)	
(A) Watershed Management Permit	\$1,100
<u>(B) Earthwork/Foundation Limited Permit</u>	<u>\$2,100</u>
(C) Notification and Request For Inspection (NRI)	\$250
(D) Facility Connection Authorization (within City of Chicago)	\$1,000
(E) Permit Revision	\$500



# Thank You

Metropolitan Water Reclamation District of Greater Chicago  
100 East Erie Street  
Chicago, Illinois