ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

ARTICLE SUMMARY

This section provides guidance on obtaining a **Watershed Management Permit** from the **District** or an **Authorized Municipality**. The following are the various types of **Watershed Management Permits** that may be obtained:

- Regular Watershed Management Permit (WMO Permit)
- Earthwork/Foundation Limited Permit (Earthwork Permit)
- Single Family Home Special Flood Hazard Area Permit (SFHA Permit)
- Notification and Request for Inspection (NRI)
- Facility Connection Authorization (FCA)
- Permit Revision

These permit types and their applicability will be further discussed in the "Watershed Management Permit Types" section of this Article of the TGM.

The guidance provided in this Article includes general submittal requirements for **Watershed Management Permits**, as well as specific requirements relating to supplemental submittal packages. Requirements for the appropriate permit Schedules, signatures, plan sheets, exhibits, fees, revisions, construction timeline, and record drawings are also included. The specific submittal packages covered under this Article are as follows:

- Erosion and Sediment Control
- Stormwater Management
- Floodplain
- Wetland
- Riparian Environment
- Qualified Sewer
- Maintenance and Monitoring Plan

NOTE: All bold words are defined in Appendix A of the WMO and the TGM.

WATERSHED MANAGEMENT PERMIT TYPES

The following sections outline the different **Watershed Management Permit** types and specific requirements for each. All **Watershed Management Permits** must be submitted with original signatures and applicable fees to:

Metropolitan Water Reclamation District Local Sewer Systems Section 111 East Erie Street, 6th floor Chicago, IL 60611

For **projects** located within an **Authorized Municipality**, the **Watershed Management Permit** must be submitted to the **Authorized Municipality** for review and coordination with the **District**. **Watershed Management Permit** applications and supplemental permit forms can be found on the **District's** WMO website, wmo.mwrd.org.

WMO PERMIT

A regular **Watershed Management Permit** (WMO Permit) is the most common permit type and may be issued by either the **District** or an **Authorized Municipality** (**Authorized Municipalities** are discussed in <u>Article 14</u> of this **TGM**.) The WMO Permit must be signed and sealed by a registered **Professional Engineer**, certifying that the technical submittal meets the design criteria contained in the WMO. The supplemental permit forms (Schedules) are listed on Page 1 of the WMO Permit application and provide an outline of the applicable permitting requirements for a **project**. Not all Schedules are required for every permit, and requirements will vary depending on the scope of work. The Schedules are described as follows:

GENERAL REQUIREMENTS:

- Schedule A Project Information
- Certifications and Signatures

Soil Erosion and Sediment Control (Article 4):

- Schedule P Soil Erosion and Sediment Control
 - Not required for **projects** that only include utility installation.

STORMWATER MANAGEMENT (ARTICLE 5):

- Schedule D Detention and Stormwater Management Facilities (WMO)
 - Required for runoff, volume control, and detention facilities meeting the design standards of, or modifying facilities designed to the standards of §504 of the WMO

- Schedule D_{Legacy} Detention and Stormwater Management Facilities (Legacy)
 - Required for runoff, volume control, and when existing detention facilities, constructed prior to the WMO (May 1, 2014), are being utilized to meet detention requirements, per §505 of the WMO
- Schedule K Affidavit of Disclosure of Property Interests
 - Includes Exhibit A Current Survey of Property Interests (Plat of Survey)
 - > Two notarized copies with original signature required
 - Schedule K is not required for projects in the public right-of way (ROW) and is only required for projects that are below the property holding thresholds which require detention, as provided in Table 2 of the WMO.
- Schedule L Notice of Requirements for Stormwater Detention
 - Includes Exhibit A Current Survey of Property Interests (Plat of Survey)
 - Applicable for sites in which detention has not previously been provided for at least 0.50 acre of undeveloped area

FLOOD PROTECTION AREAS (ARTICLE 6):

- Schedule H Hazard Areas (Floodplain/Floodway/Riparian Environments)
- Schedule W Wetlands and Wetland Buffer Areas

QUALIFIED SEWER CONSTRUCTION (ARTICLE 7):

- Schedule B Sewer Summary
- Schedule C Sewer Connections
- Schedule E Lift Station and/or Force Main
 - > Only required for public lift stations serving multiple **owners**
- Schedule F Characteristics of Waste Discharge
 - > In conjunction with Schedule G, for facilities producing industrial wastes
- Schedule G Treatment or Pretreatment Facilities
 - > In conjunction with Schedule F, for facilities producing industrial wastes
- Schedule J Affidavit Relative to Compliance with Article 7

- Overhead Plumbing and Footing Drain Discharge
- Only required if **municipality** has not adopted an ordinance requiring overhead plumbing and prohibiting footing drain discharge into the sanitary sewer system (typically unincorporated areas, and rarely required)
- Schedule O Outfall, Direct Connection, District Owned or Leased Property
 - Required for both new and reconstructed outfalls
 - Required for direct connections to District Interceptors, TARP structures, facilities, or reservoirs
 - Required for development on District land

MAINTENANCE AND MONITORING PLAN

- Schedule R Recording and Maintenance
 - Includes Exhibit R Recording Exhibit
 - To be submitted with permit application, and then final as-built must be recorded and submitted prior to permit close-out (Request for Final Inspection, or RFI)
 - > Two notarized copies with original signature required
 - Schedule R/Exhibit R is not required for projects that are not monetized and located in the public ROW or on publicly owned property.

EARTHWORK PERMIT

An Earthwork/Foundation Limited Permit (Earthwork Permit) may be issued by either the **District** or an **Authorized Municipality**. The Earthwork Permit must be signed and sealed by a registered **Professional Engineer** and approved by the **Permittee**, who will guarantee the site will be brought into compliance with the WMO should the **project** default during construction.

This optional permit type exists to provide construction scheduling flexibility while an **applicant** is working to obtain a full WMO Permit. Obtaining an Earthwork Permit allows for grading and foundation work in limited circumstances (see below), as long as a WMO Permit is submitted within ninety days. **Erosion** and **sediment control practices** are required, and onsite **floodplain** must be designated in the field, per the delineation shown on the approved **erosion** control plan. All work performed under this permit type is considered "at-risk", and may be modified under the WMO permit.

Mitigation for **stormwater runoff** must be made via an unsewered temporary **stormwater** storage basin, sized for the proposed **development** area by using the simplified nomograph

method for detention basins. The temporary mitigation basin must be dewatered mechanically without the use of sewer connections or permanent pump installations. These measures must be provided for all sites utilizing Earthwork Permits, regardless of **ownership** or **property interest**.

The Earthwork Permit is <u>prohibited</u> for **sites** with potential impacts to **wetlands** or **riparian environments**.

Only grading or foundation work outside the **flood protection area** is allows under the Earthwork Permit. The following activities are <u>not</u> allowed under this permit type:

- Qualified sewer construction
- Development in the regulatory floodplain or regulatory floodway
- Volume control practices
- Detention facilities
- Outfalls to waterways
- **District** impacts

SFHA PERMIT

A Single Family Home – Special Flood Hazard Area (SFHA Permit) may be issued by either the District or an Authorized Municipality. The SFHA Permit ensures proper elevation protection for single-family homes located within the regulatory floodplain. The first section of the SFHA Permit seeks to determine whether the single-family home is within a flood zone by elevation. The following sections determine required building elevation and compensatory storage.

The SFHA Permit is also applicable to **single-family homes** within 100-feet of the mapped **FEMA FIRM**. The SFHA Permit will be used to make a determination of whether the **single-family home** is within the flood zone by elevation, or is reasonably protected by already being elevated above the **BFE**. If already above the **BFE**, the SFHA Permit will be issued without requiring **building** elevation or **compensatory storage**, as long as no **development** occurs within any of the property area with elevation below the **BFE**. A **single-family home** located within 100-feet of the mapped **FEMA FIRM** that can demonstrate protection from **flooding** by a berm or other elevated barrier may be considered to be out of the **floodplain** by elevation.

NRI

A Notification and Request for Inspection (NRI) is only applicable for certain types of **qualified sewer** construction, which are found in <u>Article 7</u> of the WMO, and is solely issued by the **District**. The NRI is not required to be signed and sealed by a registered **Professional Engineer**, and can be submitted by the **owner**, the **municipality**, a contractor, or a design engineer. Engineering plans are not required, and a sketch or marked-up aerial map can serve to indicate where the **qualified sewer** is located.

The NRI is primarily used for sewer rehabilitation projects within **municipalities** or sanitary districts. However, minimal new sewer can be permitted under an NRI if <u>all</u> the following conditions are met:

- New sewer is less than 25 linear feet
- New sewer does not include a new **building** service connection
- New sewer does not make a new service connection to the existing public sewer main
- Replacement sewer is the same size and within 5-feet of the original alignment
- **Development** area is less than 0.50 acre

Demolition of an existing **building** and re-use of the sewer for a replacement or new **building** is considered a new **building** connection, even if the **building** is within the same footprint. This **qualified sewer** construction requires a WMO Permit.

FCA

A **Facility Connection Authorization** (FCA) may only be used within the City of Chicago and is solely issued by the **District**. The FCA must be signed and sealed by a registered **Professional Engineer** to indicate the technical submittal meets the design criteria contained in the WMO.

Direct connections to **District** facilities and new or reconstructed **outfalls** to a **waterway** or Lake Michigan require an FCA when located within the City of Chicago. Refer to <u>Article 2</u> of this **TGM** for more information on FCA applicability.

PERMIT REVISION

A Permit Revision may be issued by either the **District** or the **Authorized Municipality** which originally issued the WMO Permit. Permit Revisions document any proposed changes to the approved permit. A Permit Revision may be obtained by submitting the following:

• A letter from the design engineer describing the changes and reason for the changes

- A letter from the municipal/system engineer granting approval of the changes
- Two (2) copies of revised design drawings (only the sheets that have changed), signed and sealed by the design engineer of record
- Two (2) copies of revised permit forms, signed and sealed by the design engineer of record
- Fee Payment Voucher and Permit Revision fee

Permit Revisions can be applied for prior to the approval of the Request for Final Inspection (RFI). In some cases, Permit Revisions related to minor modifications to **District** permitted **detention facilities** can be obtained after the RFI is approved.

§300 GENERAL REQUIREMENTS

This section of the WMO covers some universal requirements and limitations of **Watershed Management Permits**.

Either the **District** or the relevant **Authorized Municipality** will make the final determination that all pertinent information has been submitted to either begin review or issue a **Watershed Management Permit**. Additional information, calculations, or documentation may be requested at any time prior to issuing the **Watershed Management Permit**. Specific submittal requirements are addressed later in this Article. Further information on **Authorized Municipalities** can be found in <u>Article 14</u> of this **TGM**.

LIMITATIONS

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

QUALIFIED PERSON

The presence of **floodplain** or **floodway** must be acknowledged or denied by a **Professional Engineer**. While the presence of **floodplain** and **floodway** on a project site can be determined by reviewing the effective Flood Insurance Rate Maps (**FIRMs**), effective Flood Insurance Study (**FIS**) profiles, and the site-specific topography, the presence of **wetlands/buffers** and **riparian environments** requires training and experience in identifying these areas. Most **Professional Engineers** have not undergone this type of training, and most likely will not make the statement as it pertains to **wetlands** or **riparian environments**.

When sufficient evidence indicates the possible presence of wetlands/buffers and riparian environments, the project submittal must include a certification from a Wetland Specialist or Professional Engineer either denying or acknowledging the presence of these areas. If present, Schedule W must be submitted as part of the Watershed Management Permit and prepared by a Wetland Specialist. The Wetland Specialist is responsible for the review of all delineation reports, impacts, mitigation plans, and other documentation related to wetlands, buffers, and riparian environments. Refer to guidance provided later in this Article, under the Wetlands and Buffers Submittal Requirements section.

To qualify as a Wetland Specialist, a person must meet one of the following requirements:

- A. Certified as an Environmental Scientist in DuPage County or a Certified **Wetland Specialist** (CWS) in Lake County;
- B. Professional Wetland Scientist certification by the Society of Wetland Scientists (SWS);
- C. Minimum of a bachelor's degree in a biologic science or earth science <u>and</u> at least one of the following:
 - 1) Three (3) years cumulative (full-time) **wetlands** experience in the Upper Midwest Region on **wetland**-related projects; or
 - 2) Completion of at least 100 wetland delineation projects in the Upper Midwest Region;
- D. Six (6) years cumulative (full-time) **wetlands** experience in the Upper Midwest Region on **wetland**-related projects without a degree type noted above.

Sole Permittee

Existing Sole Permittee

Some previously issued permits in unincorporated areas allowed **sewage** to discharge directly to a **District** interceptor sewer. These permits were not signed by a **municipality** and are known as Sole Permittee permits. If a project with qualified sewer was previously permitted in an unincorporated area but is now within a **municipality's** corporate limits, the new permit will not be considered a Sole Permittee permit and must be signed by the municipality. Existing Sole Permittee permits still located in an unincorporated area are assumed to have a special condition requiring surety (maintenance bond or evidence of financial responsibility) for the sewer systems. When a new permit application is submitted for proposed work, the existing surety amount may require update for cost inflation and shall be updated to include any new sewer work. If the existing permit does not include the requirement for surety, it will be required under the new permit. The surety amount should be set as the nominal construction cost of building the sanitary sewer system as submitted by the applicant, plus a cost factor for surface improvements, i.e., sidewalks, driveways, buildings, landscaping, etc. that may have to be replaced in conjunction with repairs, and an annual increase in the amount due to inflation. The surety must be a source of funds from which the District can draw upon, should the Sole **Permittee** default. Some existing **Sole Permittee** permits do not require the above mentioned surety because the property owner provided an easement to the District and in exchange was granted a connection to a **District** interceptor for sole and exclusive use.

New Sole Permittee

Approval is required from the **District's Board of Commissioners** for all new **Sole Permittee** permits that include **qualified sewer**. They are only accepted in unincorporated areas, or if any potential **Permittee** provides written documentation refusing to sign the **Watershed Management Permit**. The **Co-Permittee** must comply with the following:

1) The facilities to be serviced are for the sole and exclusive use of the property owner, and no sewer extension is contemplated for other private users

- 2) The area to be served is outside the jurisdiction of any local sanitary district or public utility company certified for such services
- 3) Explore the feasibility to connect to sewer system in adjacent jurisdiction(s) and if not allowed, obtain written denial
- 4) Provide surety as mentioned above in Existing **Sole Permittee** section;
- 5) Record the permit against the title of the property with the Cook County Recorder of Deeds
- 6) If the sewer system extends off of the Sole Permittee's property, provide easement(s) and/or agreement(s) to demonstrate permission to access areas for construction and subsequent maintenance
- 7) Provide evidence of fee simple **ownership** of the property to be served, and a copy of the legal description of the property. If the property owner is part of a corporation, submit a license to do business in Illinois. If the property owner is other than an individual, submit names of officers or partners
- 8) Attend a pre-application meeting with **District** staff to discuss the proposed connection to the **District's** interceptor

For the **stormwater** and/or **development** portions of **projects** without a **Permittee**, the **Watershed Management Permit** may be issued without Cook County signing as the **Permittee**, if they refuse to do so in writing. The permit must be recorded with Cook County Recorder of Deeds according to §307 of the WMO. Townships that have sewer or **stormwater** authority are considered the **Permittee**, and those projects would not be subject to **Sole Permittee** provisions. Additional **maintenance** requirements found in <u>Article 9</u> of the WMO and this **TGM** must be met in these cases.

Non-District Approvals

FEDERAL AND STATE AGENCIES

Prior to commencing construction, all appropriate approvals from federal and state agencies must be obtained. Many of these approvals will be part of the various **Watershed Management Permit** submittals, including, but not limited to, **OWR** approval for construction in the **floodway**, **Corps** approval for impacts to **jurisdictional wetlands**, **IEPA** approval for discharge to **waterways**, and **IDOT** approval for roadwork. All necessary federal and state approvals must be obtained, even if not required by a specific **Watershed Management Permit** submittal.

LOCAL AND REGIONAL AGENCIES

Local approval must be obtained from the **municipality** (**Permittee**) in order to apply for a **Watershed Management Permit**. Prior to construction, any required regional approvals must be obtained, even if not required by a specific **Watershed Management Permit** submittal. Examples of regional authorities include, but are not limited to, townships, soil conservation districts, drainage districts, highway departments, and park districts.

FOREST PRESERVE DISTRICT OF COOK COUNTY

Applicants 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.

This requirement applies only to projects proposing the following:

- A. Any work directly on FPD holdings or property;
- B. **Projects** located adjacent to FPD holdings or property consisting of any of the following:
 - 1) New point discharges onto FPD holdings or property;
 - 2) Direct storm sewer connections to FPD owned infrastructure; or
 - 3) Proposed **runoff** that causes the **hydrology** on FPD holdings or property to fall below eighty percent (80%) or exceed one-hundred fifty percent (150%) of the existing condition **storm event runoff** volume for the 2-year, 24-hour **storm event**.

For **projects** in any of the above categories, written notification shall be submitted indicating the FPD has been made aware of the proposed **project** (for instance, a letter carbon copied to the **District** in which documents were transmitted to FPD for review, comments from the FPD on the proposed **project**, etc.) The FPD shall be contacted at:

Director of Planning and Development Forest Preserve District of Cook County 536 North Harlem Avenue River Forest, IL 60305

The WMO does not regulate how FPD makes determinations of adverse impacts, nor does it dictate methods for obtaining approval from FPD. All proposed **projects** must meet or exceed, the requirements of the WMO, regardless of the requirements of the FPD. The requirement to contact the FPD, as outlined in §300.5 of the WMO, does not apply to the following:

- **Development** not adjacent to FPD property;
- Non-adjacent **parcels** that are eventually, but not directly, tributary to FPD infrastructure;
- Direct connections to infrastructure not owned by the FPD; and
- Existing **outfalls** that are not being reconstructed.

§301 PERMIT FEES

Per §301.1 of the WMO, the **District** shall establish a schedule of permit fees, which may be amended from time to time. The current permit fee schedule is found in <u>Appendix F</u> of the WMO, which is approved by the **District's Board of Commissioners**. **Authorized Municipalities** establish their own fee schedules. Certain **District** fees apply for permits issued by an **Authorized Municipality**, which are discussed below.

Fees are due at the time of application, and must be submitted with a Fee Payment Voucher, outlining which fees are being paid. The Fee Payment Voucher is located on the **District's** WMO website, at <u>wmo.mwrd.org</u>. A **Watershed Management Permit** application will not be accepted without at least the Base Permit Review Fee accompanying the submittal. If the permit application is cancelled, some fees may be refundable, as indicated in the following fee descriptions.

Watershed Management Permits will not be issued without obtaining all required fees.

BASE PERMIT REVIEW FEES

A **Watershed Management Permit** application will not be accepted without receiving at least the Base Permit Review Fee. These fees are listed in Section I of <u>Appendix F</u>, and are considered non-refundable once review of the **Watershed Management Permit** application has commenced. Each permit type has a different Base Permit Review Fee associated with it.

Resubmittals associated with a **Watershed Management Permit** currently under review are not charged fees for any additional review(s).

DETENTION REVIEW FEES

Detention Review Fees are listed in Section II of <u>Appendix F</u> of the WMO. These fees are applicable for **projects** in which the property holdings meet or exceed the detention thresholds listed in Table 2 of <u>Article 5</u> of the WMO. These **projects** are required to provide new detention (Schedule D) or demonstrate capacity via **existing detention facilities** (Schedule D-Legacy when the facility was constructed under the SPO, new Schedule D when constructed under the WMO). Note that Schedule D includes runoff and volume control, and is usually required, regardless of detention requirements. The presence of Schedule D in the **Watershed Management Permit** application does not automatically trigger Detention Review Fees.

Schedule D or Schedule D-Legacy is submitted with a WMO Permit and cannot be used under an NRI, FCA, or SFHA Permit.

The Detention Review Fees are dependent on the size of the **detention service area** and whether the nomograph method or modeling is used for sizing the restrictor and volume of the **detention**

facility. The specific fee breakdown is found on the Fee Payment Voucher and <u>Appendix F</u> of the WMO. This fee is considered refundable only until review has commenced.

More information on detention design guidelines and whether a **project** qualifies for Schedule D-Legacy instead of Schedule D can be found in <u>Article 5</u> of this **TGM**.

ISOLATED WETLAND/RIPARIAN ENVIRONMENT REVIEW FEES

Isolated Wetland/Riparian Environment Review Fees are listed in Section III of <u>Appendix F</u> of the WMO, and are accompanied by Schedule W. If only **riparian environments** are present, and there are no **wetlands**, Schedule H may be used instead. Fees for Schedule H are listed below under *Other Fees*.

Schedule W is required for verification of **isolated wetlands** and mitigation of impacts to **isolated wetlands** and **riparian environments**. Schedule W is submitted with a WMO Permit and cannot be used under an Earthwork Permit, NRI, FCA, or SFHA Permit.

The **Isolated Wetland/Riparian Environment** Review Fees are dependent on whether mitigation is required, and also how much mitigation is proposed. The specific fee breakdown is found on the Fee Payment Voucher and <u>Appendix F</u> of the WMO. This fee is considered refundable only until review has commenced.

More information on **wetland** and **riparian environment** design and mitigation requirements can be found in <u>Article 6</u> of the WMO and this **TGM**.

QUALIFIED SEWER FEES

The following fees related to **qualified sewer** are listed in Section IV of <u>Appendix F</u> of the WMO, and are applicable as described below.

Sewer Inspection Fee

Sewer Inspection Fees are required for all **qualified sewer** proposed within the **District's** service area, with the exception of **storm sewers** tributary to **waterways** within the **combined sewer area** and underdrains associated with **volume control practices**. Details on what is considered **qualified sewer** are found in <u>Article 7</u> of the WMO and this **TGM**.

The Sewer Inspection Fee is applicable under the WMO Permit, FCA, and NRI, and should be submitted with the initial permit application.

For underground **detention facilities** tributary to **combined sewers**, Sewer Inspection Fees are charged based on the longest length of the underground vault. The Sewer Inspection Fee applies for all lengths of underground detention storage in pipes. The Sewer Inspection Fee is refundable for any length of sewer not constructed. However, additional fees will be required after construction if field changes necessitate installing more **qualified sewer** than originally approved

under the **Watershed Management Permit**. In such cases, the **applicant** will be invoiced for the additional Sewer Inspection Fee.

Schedule E – Pump Stations

Schedule E is required for construction or reconstruction of public pump stations, and is submitted with a WMO Permit or FCA. Schedule E cannot be used under an Earthwork Permit, NRI, or SFHA Permit.

The associated review fee for permits with a Schedule E shall be submitted with the initial application. This fee is considered refundable only until review has commenced.

Schedule O-Outfalls, District Impacts

Schedule O is required for new or reconstructed **outfalls**, direct connections to **District** infrastructure, or **development** on **District** owned land. Schedule O is submitted with a WMO Permit or FCA, and cannot be used under an Earthwork Permit, NRI, or SFHA Permit.

The associated review fee for permits with a Schedule O shall be submitted with the initial application. This fee is considered refundable only until review has commenced.

CONNECTION IMPACT FEES

Connection Impact Fees are generally rare and will only apply to properties annexed into the **District's** service area after July 9, 1998. These fees serve to recover historic capital and infrastructure costs. Fees will be assessed at such time as a **project** requiring a **Watershed Management Permit** is proposed in these annexed areas. **Connection Impact Fees** are applicable to the **project** area for all permit types. *Note: Parcels that contain publicly owned facilities performing a government function or those considered property tax exempt are not subject to Connection Impact Fees.*

The schedule of Connection Impact Fees is as follows:

- First 10% due with the initial permit application submittal
- Next 50% due within one-year of commencing construction, or substantial completion, whichever occurs first
- Final 40% due with the RFI submittal, or two years after commencing construction, whichever occurs first

Any areas dedicated as **right-of-way** (ROW) can be considered exempt from **Connection Impact Fees.** If an area is dedicated as ROW after a scheduled payment has been made, that portion of the payment will not be refunded. However, future payments may exempt the newly dedicated ROW area. **Connection Impact Fees** are only refunded if the **Watershed Management Permit** is cancelled or expires.

OTHER FEES

The following fees are listed in Section V of <u>Appendix F</u> of the WMO and are applicable in some cases, as described below.

SCHEDULE R – RECORDATION DEPOSIT

Schedule R is required for most **projects**, and is submitted with a WMO Permit. Schedule R is not applicable under an Earthwork Permit, NRI, FCA, or SFHA Permit.

The Recordation Deposit is required for any WMO Permit with a Schedule R. The fee should be submitted with the initial application. **Applicants** should keep an original copy of the Schedule R for recording purposes. At such time as the **applicant** records the as-built Schedule R/Exhibit R with Cook County and submits a copy to the **District**, the Recordation Deposit will be refunded.

Schedule H – Hazard Areas

Schedule H is required for onsite **floodplain**, **floodway**, or **riparian environments**, and is submitted with a WMO Permit or FCA. Schedule H cannot be used under an Earthwork Permit, NRI, FCA, or SFHA Permit.

The associated review fee for permits with a Schedule H shall be submitted with the initial application. This fee is considered refundable only until review has commenced.

Schedule L – Notice of Requirements of Stormwater Detention

Schedule L is required for **property holdings** meeting the detention threshold with at least 0.50 acre of proposed undeveloped land in which detention is not provided. These **projects** generally only provide detention for the proposed **development** area and not for the undeveloped area. Schedule L, and the associated Exhibit A, is submitted with a WMO Permit, and cannot be used under an Earthwork Permit, NRI, FCA, or SFHA Permit. Note that Exhibit A is also associated with Schedule K, which has no fee requirement. The presence of Exhibit A in the **Watershed Management Permit** does not automatically trigger fees.

The associated review fee for a WMO Permit with a Schedule L shall be submitted with the initial application. The **District** will record the Schedule L/Exhibit A with Cook County.

VIOLATION INSPECTIONS

If an **applicant** is sent a Notice of Violation (**NOV**), inspections related to the violation will incur fees as listed in <u>Appendix F</u> of the WMO. These fees will be invoiced or made part of the violation settlement. Violation Inspection fees are non-refundable in all cases.

VARIANCE FILING AND REVIEW

The **variance** process is detailed in <u>Article 11</u> of the WMO. The fee is required at the time of filing to offset the processing and review costs. A Petition for **Variance** will not be accepted without

submitting the full Filing and Review fee. This fee is considered fully or partially refundable only until the **Director of Engineering's** report is written.

FEES FOR AUTHORIZED MUNICIPALITY PERMITS

Authorized Municipalities set their own review fees. However, certain approvals must be granted by the **District** prior to issuing **Authorized Municipality** Permits, and the associated fees must be collected by the **District**. These fees include <u>only</u> the following, when applicable:

- Sewer Inspection Fee
- Schedule E
- Schedule O
- Connection Impact Fees

All other fees in <u>Appendix F</u> of the WMO are waived by the **District**. The above fees should be submitted to the **District** with a Fee Payment Voucher either before or during permit review. Payment of any other permit review fees are subject to the local rules and regulations of the **Authorized Municipality** and shall be coordinated with the Engineer or **Enforcement Officer** of the **Authorized Municipality**. Further information on **Authorized Municipalities** is found in <u>Article 14</u> of the WMO and this **TGM**.

SINGLE-FAMILY HOME PERMIT FEES

In general, **development** of **single-family home parcels** do not require fees from the **District**. Fees are never required for SFHA Permits. However, there are two instances in which a WMO Permit is required instead of a SFHA Permit. **Single-family home** projects are not considered fee exempt when the **development** includes:

- Wetlands and/or riparian environments
- An extension of the public sewer

PUBLICLY FUNDED PROJECTS

Publicly funded **projects**, such as municipal road **projects**, public sewer rehabilitation, government buildings, parks, and public schools, may be exempt from fees. However, **developments** on public land or **development** of land that is monetized is not considered a fee exempt project, even when undertaken by a **municipality**.

The **District** administers this policy in the spirit of intergovernmental cooperation, and reserves the right to modify this exemption at any time.

§302 WATERSHED MANAGEMENT PERMIT APPLICATION SUBMITTALS

There are certain submittal requirements that must be met prior to the **District** accepting a **Watershed Management Permit** application. Utilizing the Minimum Submittal Requirements Checklist, which can be found on the **District's** WMO website, wmo.mwrd.org, is the best way to ensure the application will be received and reviewed without delay. If an incomplete submittal is sent to the **District**, one copy of the submittal is kept on file and all other copies will be returned to the **applicant** without review.

The WMO Permit application and all related **District** permit forms (Schedules, Fee Payment Voucher, etc.) must be submitted as single-sided unbound pages (staples are ok) with original signatures, if applicable. The Earthwork Permit, SFHA Permit, NRI, and FCA may be submitted single or double sided, as these generally do not have other related permit forms attached. Specific submittal requirements are detailed in the following sections. Note that plan sheet and exhibit specifications for each submittal are found in the *Exhibits and Plan Sheets Submittal Requirements* section following the specific submittal sections.

GENERAL SUBMITTAL REQUIREMENTS

The following must be submitted for each project requiring a Watershed Management Permit:

- Two (2) copies of the applicable **Watershed Management Permit** application with all necessary original signatures
- Two (2) copies of all applicable Schedules, with original signatures, if necessary
- Two (2) copies of the plan set, with original seal and signature for all permit types except NRIs. Additional copies may be requested as part of the final permit approval.
- The common address, legal description, and property index number (PIN) of the **project** site. This information can be included by submitting a topographic survey, Exhibit A, Exhibit R, or listing on the general plan set.
- A narrative description of the project, including:
 - > Type of **project**
 - > Total property holding (contiguous ownership interest) size
 - > Size of the area under **development**
 - Denial of flood protection areas by either a Professional Engineer or Wetland Specialist if not present within the project area or 100-feet from the project if offsite.

- One (1) copy of Fee Payment Voucher Form with applicable fees
- One (1) copy of all applicable calculations, exhibits, and documentation, with original seal and signature by a **Professional Engineer**, as indicated in the specific submittal requirements sections of this Article of the **TGM**.

Submit the above items to:

MWRD Engineering Department Local Sewer Systems Section 111 East Erie Street, 6th floor Chicago, IL 60611

If the proposed **project** is within the corporate limits of an **Authorized Municipality**, then the submittals should be sent to the **municipality's enforcement officer**. If the proposed **project** involves any activities listed in §201.2 of the WMO, the applicable portions of the submittals will be forwarded to the **District** by the **Authorized Municipality**. Note, NRIs and FCAs do not fall under the jurisdiction of an **Authorized Municipality**, and shall always be submitted to the **District**.

PERMIT SIGNATURES

All **Watershed Management Permit** applications must be submitted with original signatures. If the **project** is located within a **municipality's** corporate limits, both the **Co-Permittee(s)** and **Permittee** must sign the **Watershed Management Permit**. The **municipality** is the **Permittee** and the property owner is the **Co-Permittee**.

For WMO Permits, the **municipality** or their system engineer must also sign as the *Municipal or System Engineer* on Page 8. Some permit applications require multiple sets of certifications (Pages 8 and 9) when the **sanitary** or **combined sewer** system is not owned by the **municipality**. One set provides certification for the sewer system and the other set provides certification for the **development**. When the receiving sanitary or combined sewer system routes flow through more than one **municipality**, an additional Page 8 and Page 9 are required to document approval by downstream sewer owners.

For **projects** located in unincorporated **Cook County**, the *Certificate by Municipal Engineer* and **Permittee** signatures should be obtained from the **Cook County** Building and Zoning Department. The contact information is:

Building and Zoning Bureau of Economic Development 69 West Washington, Suite 2830 Chicago, Illinois 60602 Telephone: (312) 603-0500 Fax: (312) 603-9940 TDD: (800) 526-0857 http://www.cookcountyil.gov/building-and-zoning

Cook County does not have authority over **sanitary** or **combined sewer** systems. If the project is located in a Township that has sewer authority, the Township must sign as the **Permittee**. Otherwise, the project may be subject to the **Sole Permittee** provisions of §300.3.B of the WMO.

The engineering certifications on Page 8 of the WMO Permit application must be signed by a **Professional Engineer**, as defined in the WMO. The design and inspection engineers do not necessarily need to be based in Illinois, but must have a current valid Illinois PE license. The **Professional Engineer's** dated original ink signature and valid Illinois seal must be affixed to the permit application, plans, calculations, and applicable Schedules.

EROSION AND SEDIMENT CONTROL SUBMITTAL REQUIREMENTS

The **erosion** and **sediment control** regulations are provided in <u>Article 4</u> of the WMO and this **TGM**. An itemized checklist of submittal requirements is available on the **District's** WMO website, at wmo.mwrd.org.

The **Erosion** and **Sediment** Control Submittal shall include Schedule P, with original signature by the property owner, the **NPDES** ILR-10 permit information, if applicable, and a narrative that can either be a separate report or included with the required general permit submittal narrative. For sites with **disturbed area** greater than 1.0 acre or part of a larger planned common **development**, or if required by the **IEPA**, the ILR-10 permit number issued by the **IEPA** must be provided on Schedule P. The issued ILR-10 permit must be submitted to the **District** prior to commencingconstruction. Note that **projects** tributary to a **combined sewer** do not require the ILR-10 permit.

The **erosion** and **sediment** control plan shall include descriptions of the following:

- Existing land cover
- Geotechnical report, including a soils report and soil boring logs
- Hydrologic conditions of the proposed **project** area
- Areas adjacent to the **project** including a description of **flood protection areas**, discharge location(s), **outfalls**, and soil survey data
- Proposed temporary erosion and sediment control practices
- Description of how **flood protection areas** will be protected from **erosion** and **sedimentation** both temporarily and permanently
- 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

For work impacting Lake Michigan, approval must be obtained from the **Corps**. The Schedule P should reflect that this is a "special area" and approvals from the regulating agencies must be made part of the **Erosion** and **Sediment** Control Submittal.

Data and calculations must be included in the plan, which are used to size, locate, design, and maintain all **erosion** and **sediment control practices** and temporary stream crossings. Details on **erosion** and **sediment** control plan sheet requirements are found in the *Plan Set and Exhibits Submittal Requirements* section following the specific submittal sections.

STORMWATER MANAGEMENT SUBMITTAL REQUIREMENTS

The **stormwater** management regulations are provided in <u>Article 5</u> of the WMO and this **TGM**. Because the **stormwater** management requirements of the WMO are specific to the different **project** types, a flowchart has been provided to help applicants navigate the **stormwater** permitting process. The **site runoff**, **volume control**, and detention requirements are a function of the size of the **contiguous ownership** interest (**property holding**). Because the WMO provides detention allowances for certain **redevelopments**, the flowchart includes these detention requirements as well. The flowchart and an itemized checklist of submittal requirements is available on the **District's** WMO website, at wmo.mwrd.org.

The **Stormwater** Management Submittal shall include the required Schedule D or Schedule D-Legacy, with original signature by a **Professional Engineer**. Schedule D-Legacy is used for **redevelopment** of sites with **detention facilities** permitted or constructed prior to the effective day of the WMO (May 1, 2014). Detention required under the WMO or constructed for local standards, but seeking to be utilized for **redevelopment** will utilize Schedule D for **stormwater** management. The following additional permit forms may also be required:

- <u>Schedule K</u>: If the **property holdings** are less than the detention thresholds listed in <u>Article</u> <u>5</u> Table 2 of the WMO, the Affidavit of Disclosure of Property Interest (Schedule K) must be submitted. The Schedule K must have an original signature from the property owner, signature and seal of a Notary Public, and exemptions indicated on the form.
- <u>Schedule L</u>: If aproperty holding that meets the detention thresholds of <u>Article 5</u> Table 2 includes any undeveloped vacant land that is not part of the proposed project and is not being included in the detention calculations of the **Watershed Management Permit**, eight copies of the Notice of Requirements for Stormwater Detention (Schedule L) and the Exhibit A must be submitted. Two copies of the Schedule L must have original signatures from the **owner**, partnership, LLC, corporation, or land trust. All copies shall have the signature and seal of a Notary Public, and the appropriate paragraphs crossed out per the note at the bottom of Page 1 of the form.

The **Stormwater** Management Submittal shall also include a narrative, which can either be a separate report or included with the required general permit submittal narrative. The narrative requirements for the **runoff**, volume control, and detention aspects of **stormwater** management are included in each sub-section below. Details on **stormwater** management plan sheet requirements are found in the *Plan Set and Exhibits Submittal Requirements* section following the specific submittal sections.

RUNOFF

The **runoff** narrative of the **Stormwater** Management Submittal shall describe all appropriate measures necessary to meet the requirements of §502 of the WMO, and shall include the following information:

- A description of the proposed **development** area that includes xisting and proposed **impervious areas**
- A description of the existing drainage pattern, including the portion of the property that is located in separate watersheds defined in the District's DWPs, a separate sewer area, or a combined sewer area, and the discharge point(s) to a storm sewer, waterway and/or combined sewer.
- A description of the upstream **tributary area** and **stormwater** discharge downstream to allow for evaluation of offsite impacts resulting from the proposed **project**
- A description of soil types, vegetation, and land cover conditions affecting **runoff** of the **project** site for any area draining through or to the **project**

Calculations must also be included as part of the **runoff** portion of the **Stormwater** Management Submittal. The calculations must be comprised of **runoff** and upstream tributary **runoff** calculations, and any other calculations necessary to demonstrate compliance with the WMO. These may include the following, as applicable:

- Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions for sizing both **major and minor stormwater systems**
- Time-of-concentration calculations
- Curve number and/or **runoff** coefficient calculations for the existing and proposed conditions
- Calculations for sizing for major and minor stormwater systems, overland flow routes, and other stormwater facilities
- Hydraulic grade line and water surface elevations under design flow, **base flood**, and other tailwater conditions
- Assumptions or calculations utilized to determine tailwater conditions

NOTE: If the **project** does not require volume control or **stormwater** detention, and it can be demonstrated that the **development** does not modify drainage patterns upstream or downstream, then the **runoff** review can be determined by inspection and engineering judgement, and calculations are not necessarily required.

VOLUME CONTROL

The volume control narrative of the **Stormwater** Management Submittal shall describe all appropriate measures necessary to meet the requirements of §503 of the WMO, and shall include the following information:

- A geotechnical report that includes a description of soils, infiltration rates, clay percentage, and depth to the seasonably high **groundwater** level, bedrock, or other limiting subsurface layer
- A description of the utilization of the **volume control practices** hierarchy in §503.4.A-C of the WMO, including use of **retention-based practices**, offsite volume control practices, and **flow-through practices** in §503.4.A and §503.4.B, and for other compliance methods described in §503.4.C
- A description and documentation of any **site constraints** that may preclude the use of **volume control practices**
- Documentation that **flow-through practice(s)** required in §503.4 of the WMO meet the pretreatment requirement

Calculations must also be included as part of the volume control portion of the **Stormwater** Management Submittal. The calculations shall include the following, as applicable:

- The impervious area and associated volume control storage required for the project
- The quantifiable storage provided in each proposed **volume control practice** to verify adequate storage;
- Calculation of volumes for other compliance methods described in §503.4 of the WMO, if applicable

DETENTION FACILITY

The **detention facility** portion of the **Stormwater** Management Submittal shall describe all appropriate measures necessary to meet the requirements of §504 or §505 of the WMO, and shall include the following information and calculations, when applicable:

- Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions and to determine the **release rate** and **required detention volume**;
- Determination of **control structure** sizing and storage volume

- Elevation-storage-discharge relationship and associated calculations for the **detention facility** and **control structure**
- Demonstration that the overflow **structure** and overflow path are sized in accordance with §504.13.D of the WMO
- Assumptions or calculations utilized to determine the **BFE** and/or other tailwater conditions
- Drawdown time for each **detention facility**

FLOODPLAIN SUBMITTAL REQUIREMENTS

The **floodplain** requirements for **development** are contained in <u>Article 6</u>, specifically §601 and §602, of the WMO and this **TGM**. A flowchart has been provided to help applicants navigate the **floodplain** permitting process. The flowchart and an itemized checklist of submittal requirements is available at the **District's** WMO website, at wmo.mwrd.org.

The **Floodplain** Submittal shall include Schedule H with original signature by a **Professional Engineer**, correspondence from the **OWR**, and a narrative, as described below. Either a letter of no objection stating that no permit is necessary, or a copy of the completed joint application form (NCR Form 426 "Protecting Illinois Waters"), signed by the **applicant**, must be made part of the **Floodplain** Submittal. Any associated correspondence submitted to or received from **OWR** must also be made part of the **Floodplain** Submittal prior to issuing the **Watershed Management Permit**.

The **floodplain** narrative can either be a separate report or included with the required general permit submittal narrative. The narrative shall include a description of the proposed **development** within the limits of the regulatory floodplain and regulatory floodway, as well as details of **floodproofing** measures, including material specifications, construction methods, and calculations. A determination of the **BFE** and **FPE** and the source of the determination should be described in the narrative, and the **BFE** and **FPE** must be shown on the plan set.

The **Floodplain** Submittal must also include a copy of the effective **FIS Flood** Profile and **FIS Floodway** Data Table for **Cook County**, when available. If the **project** area is unmapped and there is no published **FIS Flood** Profile or **Floodway** Data Table available, the **District** should be consulted to determine if additional information is available or if a project-specific **floodplain** study is required. Additional information on study requirements is found in <u>Article 6</u> of the WMO and this **TGM**.

Revisions to the **FIRM(s)** must be submitted to show the most recent **regulatory floodplain** and **regulatory floodway** data for the **parcel**. Hydrologic and hydraulic calculations, modeling, and all **CLOMR/LOMR** applications must also be included, as applicable.

Calculations are required for **floodplain** fill, **compensatory storage**, and **development** within the **floodway**, and shall include:

- Cross section profiles of the **floodplain** fill and **compensatory storage**
- A plan view delineating the location of cross sections
- Tabular summary showing fill below and above the existing 10-year **flood** elevation and cuts below and above the proposed 10-year **flood** elevation, up to the **BFE**

For **development** in the **regulatory floodway**, the following calculations or analyses shall be submitted to demonstrate compliance with §602.22 of the WMO

- Existing and proposed hydrologic and hydraulic analysis (land use and stream systems)
- Tabular summary of existing and proposed flows, **flood** elevations, and **floodway** velocities for the 2-year, 10-year, and 100-year **storm event**
- Input and output for hydraulic and hydrologic computer models
- Flood damage analyses for new, modified, or replacement bridges, culverts or impoundments
- Hydraulic analyses of new, modified, or replacement bridges, culverts, or impoundments
- Transition sections as required in §602.25 of the WMO
- Analyses of hydrologically and hydraulically equivalent compensatory storage

Details on **floodplain** and **floodway** plan sheet requirements are found in the *Plan Set and Exhibits Submittal Requirements* section following the specific submittal sections.

WETLANDS AND BUFFERS SUBMITTAL REQUIREMENTS

The **wetland** requirements for **developments** are contained in <u>Article 6</u>, specifically §603, §604, and §605 of the WMO and this **TGM**. Because there is some overlap when permitting **wetland/buffers** and **riparian environments**, the submittal requirements are combined into one comprehensive flowchart and submittal checklist, which are available on the **District's** WMO website, at wmo.mwrd.org.

Wetlands must be delineated and classified by a **Wetland Specialist**. Determination should be made using the *Corps of Engineers Wetland Delineation Manual*, published in January 1987 (<u>https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4532/</u>).

Supplemental manuals must accompany this guidance, and include the following:

• The most recent version of the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Edition.* As of the date of this Article of the **TGM**, Version 2.0, published in 2010, can be found at:

https://usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7630

• The most recent version of the *Field Indicators of Hydric Soils in the United States* published by USDA and **NRCS**, in cooperation with the National Technical Committee for Hydric Soils. As of the date of this Article of the **TGM**, Version 8.2, published in 2018, can be found at:

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_053171.pdf

A site visit should be conducted to determine if there is **wetland** potential.

WETLAND SUBMITTAL REQUIREMENTS

The **Wetland** Submittal is required any time there is an onsite **wetland** or impacts to an offsite **wetland**, regardless of whether it is considered an **isolated wetland** or a **Corps Jurisdictional Wetlands**. The **Wetland** Submittal shall include Schedule W with original signature by a **Wetland Specialist**. Schedule W uses a series of questions to identify if additional submittal items are required, such as correspondence from the **Corps**, a **wetland** narrative, a delineation report, and mitigation documentation. If no additional submittal items are required, then the **Wetland Specialist's** signature serves as a statement of no impact to **wetlands**.

The requirements vary slightly between **standard isolated wetlands** and **high-quality isolated wetlands**, which will be discussed below. Projects with **Corps Jurisdictional wetlands** do not need to submit the same level of detail required for **isolated wetlands**, but must still submit the correspondence from the **Corps**.

Details on **wetland** delineation and mitigation plan sheet requirements are found in the *Plan Set* and *Exhibits Submittal Requirements* section following the specific submittal sections.

CORRESPONDENCE FROM THE CORPS

The WMO protects **wetlands** in **Cook County**. However, the WMO only regulates **isolated wetlands**. **Corps Jurisdictional Wetlands** must follow the requirements of the **Corps**. Because of this, the jurisdiction must be determined for any **wetlands** located on **property holding** or offsite **wetlands** with potential impacts. The WMO requires one of the two following items from the **Corps**:

- A **Corps Durisdictional Determination** (JD) indicating that the impacted **wetland** is not under the jurisdiction of the **Corps**; or
- 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**.

The JD or the Section 404 and NCR Form 426 applications must be submitted with the WMO Permit to initiate review by the **District**. The approved Section 404 permit, if required, must be submitted prior to issuance of the WMO Permit. A **Corps** Letter of No Objection (LONO) is not an acceptable substitute for either of the above.

WETLAND NARRATIVE

The **wetland** narrative can either be part of a separate report or included with the required general permit submittal narrative. The narrative shall include:

- A description of the **wetland** location with respect to the **project**
- The size of all wetlands and wetland buffers on the site
- Wetland functions, as indicated in §603.1 of the WMO
- Whether wetlands are considered Corps Jurisdictional Wetlands or isolated wetlands
- Type of **isolated wetland** (high-quality or standard)

ISOLATED WETLAND DELINEATION REPORT

The WMO has different requirements for **standard isolated wetlands** less than 0.10 acre in aggregate, including any isolated waters contiguous to the **wetland**, as compared to **high-quality isolated wetlands** and **standard isolated wetlands** greater than or equal to 0.10 acre. These requirements are found in <u>Article 6</u> of the WMO and this **TGM**.

The following items must always be included in the **Wetland** Submittal:

- A delineation of the **isolated wetlands** consistent with the requirements for **wetland** delineation provided in §603 of the WMO
- All **Corps** "Routine Wetland Determination Data Form(s)"
- Map submittals in accordance with §303 of the WMO

If **high-quality isolated wetlands** and/or **standard isolated wetlands** greater than 0.10 acre are present, the **Wetland** Submittal must also include the following additional information:

- 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. Classification is determined by the following:
 - 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
 - An Illinois Department of Natural Resources (IDNR) threatened and endangered species consultation
 - A United States Fish and Wildlife Service (USFWS) threatened and endangered species consultation
- Photos of all **wetlands** and **wetland buffers**

WETLAND MITIGATION DOCUMENTATION

Impacts to **wetlands** generally require mitigation measures, as outlined in <u>Article 6</u> of the WMO and this **TGM**. If mitigation is required, a **wetland mitigation** document must be developed in accordance with §604 of the WMO. Documentation shall be provided, as indicated below, based on the **wetland** classification.

STANDARD ISOLATED WETLANDS

Development that impacts **standard isolated wetlands** with a total acreage less than one-tenth of an acre (0.10 acre), 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.

For impacts to **standard isolated wetlands** with a total acreage greater than or equal to onetenth of an acre (0.10 acre), including **contiguous Isolated Waters**, the **Wetland** Submittal shall include documentation indicating that no practicable alternative to **wetland** modification exists.

The following documentation shall also be provided, if applicable:

- An evaluation of the indirect impacts to **isolated wetlands** on the site and offsite **wetlands** 100-feet beyond the **project** area. Evaluation must include proposed **wetland hydrology** and an inundation and duration analysis.
- 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
- 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

HIGH QUALITY ISOLATED WETLANDS

Impacts to **high quality isolated wetlands** should be avoided whenever possible, regardless of economic impacts. Mitigation measures, as detailed in <u>Article 6</u> of the WMO and this **TGM**, are more intensive than for **standard isolated wetlands**. For impacts to **high quality isolated wetlands**, documentation must be provided indicating that the proposed impact represents the least amount of impact required to allow for a feasible use of the property, including:

- The presence of **high quality isolated wetlands** precludes all economically feasible uses and no practicable alternative to **wetland** modification exists, and/or
- Avoidance of **high quality isolated wetlands** would create a hazardous condition and no practicable alternative to **wetland** modification exists

RIPARIAN ENVIRONMENT SUBMITTAL REQUIREMENTS

The **riparian environment** requirements for **developments** are contained in <u>Article 6</u>, specifically §606 and §607, of the WMO and this **TGM**. Requirements found in these sections not only include impacts to riparian environments, but also impacts to **Jurisdictional Waters of the U.S**.

Because there is some overlap when permitting **wetland/buffers** and **riparian environments**, the submittal requirements are combined into one comprehensive flowchart and submittal checklist, which are available on the **District's** WMO website, at wmo.mwrd.org.

Details on **riparian environment** plan sheet requirements are found in the *Plan Set and Exhibits Submittal Requirements* section following the specific submittal sections.

RIPARIAN ENVIRONMENTS

The **Riparian Environment** Submittal shall include Schedule H or Schedule W with original signature by a **Professional Engineer** (Schedule H) or **Wetland Specialist** (Schedule W). The District will accept either Schedule H or Schedule W, depending on the characteristics of the **project** with regards to other **flood protection areas**, and an inventory of the function of the **riparian environment** in accordance with §606.1 of the WMO. For example, if the **riparian environment** is associated with or located in a **floodplain** or **floodway** and there are no **wetlands**, Schedule H may be submitted. However, if **wetlands** are present, but there is no **floodplain**, the **riparian environment** information may be submitted via Schedule W instead.

A delineation of **riparian environments** shall be made in accordance with §606.2 of the WMO. This section of the WMO indicates how to determine the buffer limits, which dictates the area that is to be evaluated for the presence of **riparian environments**. The boundary of any **riparian environments** located within the buffer limits must be indicated and made part of this submittal and the associated plan sheets.

RIPARIAN ENVIRONMENT MITIGATION DOCUMENTATION

For impacts to **riparian environments**, documentation must be provided that describes the impacted riparian functions and how their values will be mitigated. A mitigation document must be developed in accordance with §607 of the WMO and plan sheets in accordance with §303.3.K of the WMO. Documentation should include the following:

- The erosion and sediment control practices to be utilized to minimize and control sediment and degradation of downstream waterways
- 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 WMO, including the **floodplain/floodway** requirements outlined in §601 and §602 of the WMO

• Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details

Impacts to **riparian environments** may be mitigated via replacement or enhancement of impacted functions. Buffer averaging is another mitigation method that may be utilized for **riparian environment** impacts. <u>Article 6</u> of this **TGM** includes information on mitigation methods and how to meet WMO requirements.

IMPACTS TO JURISDICTIONAL WATERS OF THE U.S.

Impacts to **Jurisdictional Waters of the U.S.** require approval from the **Corps**. If impacts are proposed, one of the following forms of correspondence from the **Corps** must be included in the **Riparian Environment** Submittal:

- A Letter of No Objection (LONO) stating that no permit is necessary
- 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 **applicant**

The signed Section 404 and NCR Form 426 applications submitted with the **Watershed Management Permit** is sufficient to initiate review by the **District**. However, the approved Section 404 permit must be submitted prior to issuance of the WMO Permit.

Channel relocation of an existing waterway shall be mitigated and documented to show that:

- The length of the mitigated channel is greater than or equal to the length of the disturbed channel.
- The proposed methods which will allow naturalizing to occur, such as meandering, pools, or riffles for relocated channels. Proposed methods are expected to be able to withstand all storm events up to the **base flood** without increased **erosion**
- The methods by which the normal flow within the channel will be diverted to construct the new or relocated channel

QUALIFIED SEWER SUBMITTAL REQUIREMENTS

The **qualified sewer** requirements are contained in <u>Article 7</u> of the WMO and this **TGM**. Standard details and general notes regarding **qualified sewer** are found in <u>Appendix C</u> of this **TGM**. An itemized checklist of submittal requirements is available at the **District's** WMO website, at wmo.mwrd.org. Schedules A, B, and C are always required and made a part of the WMO Permit, even when **qualified sewer** is not proposed. The NRI and FCA are only used for **qualified sewer**. **Qualified sewer** is not allowed under SFH and Earthwork permits.

GENERAL REQUIREMENTS

Most projects will not be subject to all the requirements for **qualified sewer**, but some requirements are necessary regardless of project scope. The following items shall be made part of the **Qualified Sewer** Submittal:

- A narrative description of any live sewer connection or live sewer bypass protocol. The narrative can either be a separate report, included with the required general permit submittal narrative, or indicated on the utility plan sheet.
- A recorded **maintenance** agreement between all owners when a new connection to a privately-owned sewer is proposed
- All **District** required general notes, approved materials, applicable standard details (or equivalent), technical requirements, and design guidelines for **qualified sewer** available from this **TGM**

Calculations must also be included as part of the **Qualified Sewer** Submittal. The calculations shall be accompanied by a service area and future service area exhibit, and shall include the following, as applicable:

- Population Equivalency (PE) calculations for expected sewer flows based on new, existing, and/or expanded development
- Other calculations necessary to demonstrate compliance with the WMO

Sewer lengths and proposed appurtenances shall be listed on the appropriate **Watershed Management Permit** form – NRI, FCA, or Schedule B. All proposed new, rehabilitated, or replaced **qualified sewers** must be listed on the form. Non-qualified sewer, such as **storm sewers** in the **separate sewer area** that are tributary to a **waterway**, should not be listed on the form. Specifics on what constitutes **qualified sewer** is found in <u>Article 7</u> of the WMO and this **TGM**.

Details on **qualified sewer** and utility plan sheet requirements are found in the *Plan Set and Exhibits Submittal Requirements* section following the specific submittal sections.

PUBLIC PUMP STATIONS AND FORCE MAINS

Projects that involve public pump stations and/or force mains must submit Schedule E with the **Watershed Management Permit** application. Public pump stations and force mains are considered to be those that provide service for multiple users, regardless of **ownership**. Private pump stations serving a single parcel are not considered public pump stations and do not require Schedule E.

New construction and replacement/rehabilitation of pump stations and force mains are covered under Schedule E. As stated earlier in this Article of the **TGM**, Schedule E cannot be used under an NRI, and projects proposing this type of work must obtain a WMO Permit.

Calculations for pump station design must be submitted, including:

- Design population including average and peak flow with service area map
- Narrative for basis of pump station design population (service area or actual flow monitoring data)
- Forcemain pipe friction and design head losses
- Wet well capacity, cycle time, detention time
- Narrative of alternative power source
- System curve and pump performance curve
- The logic of the Programmable Logic Controller, including pump operation elevations
- Buoyancy calculations when high groundwater is present

INDUSTRIAL WASTES

The **District** allows domestic **sewage** to be discharged into sewer systems tributary to **District** facilities. Any industrial wastes must be evaluated for potential contaminants and prohibited compounds prior to discharge. Pre-treatment of industrial wastes may be necessary to ensure the discharge meets the requirements of the **District's Sewage and Waste Control Ordinance** and User Charge Ordinance. Both ordinances are available on the **District's** website, at mwrd.org.

Any proposed industrial activity must be documented with the permit application by submitting Schedules F and G and a narrative characterizing the wastes being generated, treatment processes, and flow loading. The narrative can either be a separate report or included with the required general permit submittal narrative.

DIRECT CONNECTIONS TO DISTRICT INFRASTRUCTURE

New direct connections to **District** owned infrastructure are discouraged. If there is no viable alternative to making a new direct connection, coordination must be made with the **District's** Local Sewer Systems Section and Collection Facilities/TARP Section. Pre-application meetings are available for **applicants**, with the request that the **municipality** be involved.

District owned infrastructure includes any of the following:

- Interceptors
- TARP Structures
- Reservoirs
- Pump Stations
- Treatment Plants
- District owned land

The **Qualified Sewer** Submittal shall include Schedule O and a narrative of excavation protocol in proximity to **District structures**. **District** owned infrastructure and **structures** must be clearly labeled on the plans. The following items shall also be made part of the submittal:

- **District** direct connection detail available from <u>Appendix C</u> of this **TGM**
- Sewer construction notes associated with construction in proximity of **District** facilities available from <u>Appendix C</u> of this **TGM**
- Clearance distances for all proposed excavation within 15 feet of **District** sewers and **structures**
- Calculations detailing supporting/protection methods for any deep excavation in proximity to **District** infrastructure, certified by a structural engineer

The local **municipality** or applicable sanitary district or utility company is required to own and maintain the length of sewer from the proposed connection point to the drop manhole directly upstream of the connection. If there is no local sewer owner in an unincorporated area, the connection would be considered a **Sole Permittee** and would be subject to the requirements for **Sole Permittees** found in §300.3.B of the WMO and this Article of the **TGM**.

Schedule O is also required for any **development** proposed on **District** owned land. Coordination for easements may be required from the **District's** Law Department. **Applicants** should consult their lease agreement prior to submitting a **Watershed Management Permit** application.

OUTFALLS

The WMO requires a **Watershed Management Permit** for new and reconstructed **outfalls**. Reconstruction of an **outfall** may include, but not be limited to, any of the following:

- Constructing a new headwall
- Relocating or extending the **outfall** pipe
- Changing the size of the **outfall**
- In-kind replacement

Maintenance of an **outfall** is limited to grouting, patching, or other cosmetic modifications that do not change the **outfall structure**. Usually, if an **outfall** is involved in a project, it is considered **qualified sewer** and requires a **Watershed Management Permit**.

The **Qualified Sewer** Submittal for **outfalls** shall include Schedule O and the **outfall** location must be clearly labeled on the plans. The following items shall also be made part of the submittal:

- District outfall general notes available from <u>Appendix C</u> of this TGM
- Construction details for the proposed **outfall** and energy dissipation
- Construction details of the proposed water quality device, if required

Water quality devices are required for all **outfalls** to Lake Michigan. If an **NPDES** Permit is required by the **IEPA**, it must be submitted prior to obtaining the RFI for the **Watershed Management Permit**. Additional requirements for **outfalls** is found in <u>Article 7</u> of the WMO and this **TGM**.

MAINTENANCE AND MONITORING PLAN SUBMITTAL REQUIREMENTS

The **maintenance** and monitoring plan submittal requirements ensure that the **applicant** provides a schedule and plan of appropriate **maintenance** for the **project** both during construction and post-construction. The requirements for **maintenance** and monitoring apply to **erosion** and **sediment control practices**, **stormwater facilities**, **compensatory storage**, **wetlands** and/or **riparian environments**, and **qualified sewer**.

The various **maintenance** and monitoring regulations are provided in <u>Article 4</u>, <u>Article 5</u>, <u>Article 6</u>, <u>Article 7</u>, and <u>Article 9</u> of the WMO and this **TGM**. An itemized checklist of submittal requirements is available at the **District's** WMO website, at wmo.mwrd.org.

The following sub-sections provide guidance on requirements for the **maintenance** and monitoring plan. Details on content requirements for the required Exhibit R are found in the *Plan Set and Exhibits Submittal Requirements* section following this section.

RECORDING SUBMITTAL

The Recording Submittal consists of two copies the required Schedule R, both with original signature by the **Co-Permittee**, signature and seal of a Notary Public, and Exhibit R with **maintenance** plan printed on or attached to the Exhibit R. **Maintenance** agreements required for **offsite volume control practices**, **detention facilities**, and private sewer connections must also be made a part of this submittal. **Applicants** should keep an additional originally signed copy of Schedule R for recording purposes.

Publicly financed projects are not required to record the Schedule R/Exhibit R, but must still provide the Exhibit R as part of the **Watershed Management Permit** submittal.

STORMWATER MANAGEMENT FACILITIES

The **Maintenance** and Monitoring Plan Submittal includes a scheduled perpetual **maintenance** program for **stormwater** management facilities. The **stormwater** management facilities, as indicated in the WMO, include:

- Major Stormwater Systems
- Volume Control Practices
- Stormwater Detention Facilities
- Native Planting Conservation Areas
- Other Stormwater Facilities

The following documentation must be submitted:

- Planned **maintenance** tasks and frequency of each task such as removal of **sediment**, debris, mowing and pruning of vegetation, and restoration of eroded areas
- Identification of the responsible parties for performing the **maintenance** tasks
- A description of applicable permanent access and **maintenance** easements granted or dedicated to, and accepted by, a governmental entity

COMPENSATORY STORAGE

The **Maintenance** and Monitoring Plan Submittal includes a scheduled perpetual **maintenance** program for **compensatory storage**. The following documentation must be submitted:

- Planned **maintenance** tasks and frequency of each task such as removal of **sediment**, debris, mowing and pruning of vegetation, and restoration of eroded areas
- Identification of the responsible parties for performing the maintenance tasks
- A description of applicable permanent access and **maintenance** easements granted or dedicated to, and accepted by, a governmental entity

WETLANDS

The **Maintenance** and Monitoring Plan Submittal includes a scheduled perpetual **maintenance** program for **wetlands**. The following documentation must be included:

- Proposed soils and soil management activities
- Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details
- Proposed **maintenance** and monitoring plan with **maintenance activities** and performance criteria outlined
- Schedule of earthwork, planting, monitoring, and maintenance
- 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**
- A description of applicable permanent access and **maintenance** and conservation easements granted or dedicated to and accepted by a governmental entity

RIPARIAN ENVIRONMENTS

The **Maintenance** and Monitoring Plan Submittal includes a scheduled perpetual **maintenance** program for **riparian environments**. The following documentation must be included:

- Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details
- Proposed **maintenance** and monitoring plan with **maintenance activities** and performance criteria outlined
- Scheduling of earthwork, planting, maintenance, and monitoring
- 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**
- A description of applicable permanent access and **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity

QUALIFIED SEWER

The **Maintenance** and Monitoring Plan Submittal includes a scheduled perpetual **maintenance** program for **qualified sewer**. Projects involving solely **qualified sewer** do not need the Exhibit R portion of the **Maintenance** and Monitoring Plan Submittal. However, when required for one of the above reasons, the **qualified sewer** shall be made part of the Exhibit R. The following documentation must be included:

- 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**
- Planned routine **maintenance** for all private pump station and pumping facilities
- Maintenance agreements for all private sewers providing service to multiple owners
- Identification of the responsible parties for performing the **maintenance** tasks
- A description of applicable permanent access and **maintenance** easements granted or dedicated to, and accepted by, a governmental entity

§303 PLAN SET AND EXHIBITS SUBMITTAL REQUIREMENTS

Plan set and exhibit requirements are provided in §303 of the WMO. It should be noted that not all exhibits and plan sheets will be applicable for a **project**. By using the permitting flowcharts, submittal checklists, and schedules, the **applicant** can determine which submittal requirements apply to a specific **project**. Flow charts and checklists can be found on the **District's** WMO website, at wmo.mwrd.org.

Depending on the complexity of the proposed **project**, combining plan sheets is desirable if information provided on all plan sheets is clear, specific, and legible. Not all plan sheets required for construction fall under the jurisdiction of the WMO. For instance, lighting plans, traffic plans, road geometry, architectural, and internal building utility plans should not be submitted to the **District** for review. These excess plans that are not related to activities regulated under the WMO will be rejected.

All plan sheets and exhibits shall be no larger than 24" x 36" and contain the following items:

- North arrow
- Legend
- Scale of at least one inch to 10 feet and no more than one inch to 100 feet (e.g., one inch to 50 feet). Note: The routing map may be at a different scale to accommodate showing the entire route, and the scale shall be noted in legible format.
- **Property holding** and/or parcel lines
- Title block with **project** name and location, sheet name and number, original preparation date, revision date(s), and contact information and address of the design engineer

MAPPING REQUIREMENTS

Some submittal packages either require or are better served by showing a map (aerial, topographic, etc.) The following mapping resources may be used to meet individual submittal requirements:

- United States Geological Survey (USGS) topographic map
- Natural Resources Conservation Service (NRCS) soils map noting hydric soils
- Cook County FIRM
- National Wetland Inventory (NWI)
- Aerial photo of the site

- Aerial photo showing onsite **wetland** and offsite **wetland** boundaries and locations of delineation data points
- Historical aerial photographs, USGS hydrological atlas, or other applicable historic information
- All required topographic information must be tied to the North American Vertical Datum of 1988 (NAVD88).

PLAN COVER SHEET

The plan cover sheet shall indicate all relevant information to navigate through the plan set. The location map, as described below, shall be included, as well as an index of sheets found in the plan set.

The location map must be included for every **Watershed Management Permit** submitted, and shall identify the **project** location, street names, highways, railroads, and **waterways**. The location map shall be to scale and include a delineation of one or both of the following, as applicable:

- 1) The conveyance route and indication of **ownership** of the storm drainage from the **project** to the receiving **waterway**
- 2) The conveyance route and indication of ownership of the sanitary, storm, and/or combined sewers from the project through the local sewer system(s) to the receiving District interceptor or facility

The above routing information must be provided on the cover or title sheet unless reference is provided on the cover or title sheet indicating routing is shown on a subsequent plan sheet. The plan cover sheet must contain the name and location of the **project** and original seal and signature of the **Professional Engineer** of record, who must be licensed in the State of Illinois.

MWRD GENERAL NOTES PLAN SHEET

The MWRD General Notes are provided on a standard plan sheet that can be found in <u>Appendix C</u> of this **TGM**, and also on the **District's** WMO website, at wmo.mwrd.org. The MWRD General Notes are available in both PDF and .dwg formats.

EXISTING CONDITIONS PLAN SHEET

The existing conditions plan must show an accurate depiction of the **project** site as it exists prior to any proposed **development**. The plan sheet shall contain the following:

• Benchmark location and information

- A delineation of any permitted stormwater facilities and structures
- A delineation of any pre-development flood protection areas
- Existing contours on entire site and 50 feet beyond the site, at a minimum of one foot intervals
- All existing structure elevations and contours if the structure is within 100 feet of the project, including top of foundation, lowest floor, lowest entry elevation, and floodproofing elevations
- Existing structures, parking lots, driveways, sidewalks, pathways, trails, and other impervious areas
- 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
- Existing utilities including sanitary, storm, water main, or any other utilities. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type must be provided
- **District** infrastructure, when located on the **site**
- Existing trees and vegetation areas

DEMOLITION PLAN SHEET

The **demolition** plan sheet shall show all proposed **demolition**. This plan may be combined with the existing conditions plan, as long as the information on the plan sheet is legible.

DIMENSIONAL OR SITE GEOMETRY PLAN SHEET

The dimensional or site geometry plan sheet shall show all proposed **development**. Proposed work must be clearly marked and differentiated from existing or undisturbed areas. If legible, this may be shown as an overlay to the existing conditions plan or combined with the **development** area exhibit discussed later in this section of the TGM.

PAVING PLAN SHEET

The paving plan sheet serves to indicate the materials used for paving, such as asphalt, concrete, permeable pavers, and gravel. This is used as a confirmation of **development** and **maintenance** areas. If legible, this plan may be combined with the grading plan, **development** area exhibit, or other related plan sheet.

GRADING PLAN SHEET

The grading plan sheet shall include a topographic layout of the site and shall contain the following:

- Benchmark location and information (if not already provided on the Plan Cover Sheet)
- Delineated limits of any **flood protection areas**
- Delineation of **stormwater facilities** and HWL
- Proposed contours of the **development** area
- Existing contours within 50 feet of proposed contours, including offsite
- Both existing and proposed contours shall be shown on the same plan when legible
- Proposed spot elevations demonstrating drainage patterns, including curb and gutter
- Location of storm, sanitary, and/or combined **structures** with rim elevations
- Proposed 100-year overland flow route

UTILITY PLAN SHEET

The utility plan sheets must delineate all existing and proposed utilities including sanitary, storm, water main, electric, gas or any others. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type must be provided.

Utility plan sheet(s) shall contain the following, as applicable:

- Benchmark location and information
- Existing **structures**, parking lots, driveways, sidewalks, pathways, trails, and other **impervious areas**
- All top of foundation elevations for existing and proposed structures
- A unique line type to distinguish between proposed and existing sewer systems
- All proposed **qualified sewer** information including:
 - Qualified sewer manhole, cleanout or other structure information including diameter, and rim and invert elevation (each labeled by compass direction), with a unique and clearly labeled identifier

- Qualified sewer labeled with length, size, material, and slope, delineated with a "proposed" linetype
- Sewer invert elevation at the upstream **building** connection
- Sewer invert elevation at any sewer or **structure** connection
- Utility crossing information and call outs, including pipe-to-pipe clearance distance, for all water main and water service intersections along the proposed alignment
- Qualified sewer manhole, structure lid cover type where appropriate (within HWL or BFE)
- All existing sanitary, storm, and **combined sewer** and associated **structure** information including pipe size, invert and rim elevation, flow direction, material type, and **ownership**
- All existing sanitary, storm, and **combined sewer** and **structures** to be demolished or abandoned, including septic systems, if not shown on **demolition** plan
- Reference to specific construction details, including:
 - > Direct connections to **District** infrastructure
 - > Drop manholes, doghouse manholes, or other specialty structures
 - Grease interceptors, triple basins, mud-basins, lint traps, acid neutralization basins, or other pre-treatment devices
 - Swimming pool drains and splash pads
- All existing and proposed sewer and water line vertical crossing elevations and horizontal separation dimensions
- 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. When the proposed sewer does not impact or connect to the existing system, the location of the existing system must be shown at a minimum
- Location of all **major stormwater systems**, **volume control practices**, **detention facilities**, including **control structures** and **HWL** delineation
- All proposed and existing downspout and sump pump discharge line locations and directions except for **residential subdivision development**

- Delineated limits of any **flood protection areas**, including the **BFE** and **FPE** specified in accordance with §601 of the WMO
- Location and limits of all easements
- The plan and profile for public **qualified sewer** main shall also include the following, when applicable:
 - Profile views or all proposed public qualified sewer main depicted on the same sheet as an accompanying plan view
 - Profiles shall follow the alignment of public qualified sewer main if substantially different from the centerline of a right-of-way alignment
 - Profile stationing to coincide with plan stationing
 - Structure diameter, and rim and invert elevations (labeled by compass direction) for all proposed qualified sewer along with a unique identifier
 - Horizontal and vertical scale
 - > Utility crossings with separation dimensions
 - Existing ground profile (and bedrock when applicable)
 - > Match line when profile covers more than one plan sheet
 - For large or complex projects, an insert map indicating immediate plan limits within the overall project

PUMP STATIONS AND FORCE MAINS

The pump station plan, profile, and schematic shall include the following, when applicable:

- Pump station and wet well plan and profile, including:
 - Critical pump operation elevations (pump off, pump on, etc.)
 - Pump installation elevation
 - Structure diameter and other relevant dimensions and elevations
 - Initial check valve and air/vacuum relief valve
- Force main profile, including:
 - Location of check valve(s)

- Location of air/vacuum relief valve(s) and blowoff valve(s) along the alignment
- Location of thrust blocks
- Stream or waterway crossing(s) and crossing provisions
- Pump performance curve (indicating horse power, impeller size, efficiency) and system curve indicated operating point
- Pump station construction details

EROSION AND SEDIMENT CONTROL PLAN SHEET

The **erosion** and **sediment** control plan sheets contain information that is part of the **IEPA** Stormwater Pollution Prevention Plan (SWPPP), and includes the following:

- Locations of erosion and sediment control practices
- A statement that installation of **erosion** and **sediment control practices** will occur prior to any soil disturbance
- A schedule for construction activities, including **stabilized** construction entrance installation, **sediment** trapping facility installation, site clearing, stockpiling, grading, construction waste and concrete/mortar washout disposal, temporary and permanent stabilization, and removal of temporary **erosion** and **sediment control practices**
- A schedule for inspection, reporting, and **maintenance** of all **erosion** and **sediment control practices**
- Contact information for the party responsible for implementation and **maintenance** of the site soil **erosion** and **sediment** control plan

The plan sheets shall also contain design details for proposed **erosion** and **sediment control practices** the following information:

- Existing contours with drainage patterns and clearly delineated **watershed** boundaries tributary to the site
- Proposed contours, locations of **waterways**, and the location of **erosion** and **sediment control practices**
- Location of **flood protection areas** and vegetated areas for the **project** that are to be preserved or avoided
- Reference to specific erosion and sediment control practice details

CONSTRUCTION DETAILS

Construction details include sewer details, **erosion** and **sediment** control details, **stormwater facility** details, etc. These standard details are found in <u>Appendix C</u> of this **TGM** and also on the **District's** WMO website, at wmo.mwrd.org. The standard details are available in both PDF and .dwg formats. Equivalent details may be submitted, and are subject to approval by the **District**.

STORMWATER MANAGEMENT EXHIBIT

The **stormwater** management exhibit directly relates to the **development** area and **tributary area** exhibits, and may be shown on the same plan, if legible. This exhibit shall contain aspects relating to **runoff**, volume control and detention. The following general aspects shall also be included:

- All existing and proposed **volume control practices** and **detention facilities** in plan and cross-sectional view
- Delineated limits of the HWL for the 100-year, 24-hour storm event for new and/or adjacent detention facilities
- Location and limits of all easements
- Delineation of all pervious and impervious areas and their respective acreage and curve number and/or runoff coefficient
- Delineation of all **unrestricted areas**, including **native planting conservation areas**
- Delineation of all upstream **tributary area** with acreage and curve number and/or **runoff** coefficient
- Construction details for all proposed stormwater facilities including, but not limited to, major and minor stormwater systems, storage basins, volume control practices, detention facilities, and control structures

Development Area Exhibit

The **development** area exhibit shall delineate all disturbed areas and indicate if areas are considered **development**, **maintenance**, and/or **demolition**. Areas that are considered **development** must be further delineated to indicate if any open space or **non-qualified development** is proposed.

TRIBUTARY AREA EXHIBIT

The tributary area exhibit shall delineate the drainage areas tributary to the **major** and **minor stormwater systems**, including:

- Time-of-concentration path(s) and associated information
- All existing and proposed HGL elevations resulting from the **critical duration analysis** for the **major stormwater system** compared to the **lowest entry elevation** of any **structure**
- Delineation of pervious and impervious areas and their respective acreage and curve number and/or **runoff** coefficient
- Area tributary to all stormwater systems
- Delineation of any non-tributary and **unrestricted areas**
- Areas of the **parcel** tributary to offsite facilities
- Construction details and/or cross-sections of the major stormwater systems with the HGL and relevant dimensions and elevations
- 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**

FLOODPLAIN PLAN SHEET

The **floodplain** plan sheets must show the location of the existing and proposed **BFE** and **floodway**, as determined in §601 of the WMO and the previous *Floodplain Submittal Requirements* section. The **FPE**, top of foundation, and **lowest entry elevations** for existing and proposed **structures** shall also be specified, as appropriate. The plan sheets shall include the following:

- Topographic survey drawings of all existing and proposed structures located on or within 100 feet of the project including the lowest floor, lowest entry elevation, and floodproofing elevations
- Plan view of cross section locations utilized to compute **compensatory storage**, plotted at a scale such that quantities can be verified
- Cross section profiles of **floodplain** fill and **compensatory storage** with unique hatching and labeled identifiers
- Tabular summary of cut and fill volumes below the 10-year flood elevation
- Tabular summary of cut and fill volumes between the 10-year and 100-year flood elevations
- Any outfalls or sewers that cross a waterway

WETLAND PLAN SHEET

The **wetland** plan sheets must show the location of **wetlands** and **wetland buffers** on or within 100-feet of the **project**, based upon a survey of the **wetland** delineation in accordance with §603 of the WMO.

The area of any proposed impact to the **wetland** or **wetland buffer** shall be shown, and must include the mitigation plan, as detailed in the previous *Wetland Submittal Requirements* section. The following mitigation items shall be shown on the plan sheet(s):

- Soil type locations and soil management activities
- Delineation of any proposed buffer averaging
- Planting zones, species, quantities, sizes, locations, specifications, methodologies, and details
- Hydrology monitoring equipment locations
- Schedule of earthwork **stabilization**, planting, **maintenance**, and monitoring
- Temporary and permanent access locations
- Applicable **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity

RIPARIAN ENVIRONMENT PLAN SHEET

The **riparian environment** plan sheets must show the location of onsite **riparian environments**, based upon a survey of the **OHWM** of the associated channel or stream. Documentation must include a plan and profile of the existing and proposed channel showing the width, depth, sinuosity, and location of in-stream **structures**.

The area of any proposed impact to the **riparian environment** shall be shown, and must include the mitigation plan, as detailed in the previous *Riparian Environment Submittal Requirements* section. The following mitigation items shall be shown on the plan sheet(s):

- Delineation of any proposed buffer averaging
- Planting zones, species, quantities, sizes, locations, specifications, methodologies, and details
- Schedule of earthwork **stabilization**, planting, **maintenance**, and monitoring
- Temporary and permanent access locations

• Applicable **maintenance** and conservation easements granted or dedicated to, and accepted by, a governmental entity

PLAT OF SURVEY – EXHIBIT A

The Plat of Survey serves to show all **contiguous ownership (property holdings)**, including any **ownership** separated by **rights-of-way** or public easements, as these areas are considered **contiguous** under the WMO. When Schedule K or Schedule L is required, the Plat of Survey becomes the associated Exhibit A. When Exhibit A is submitted with Schedule L, it must also meet the recording requirements of Cook County.

The Plat of Survey must meet the boundary plat requirements of Section 1270.56 of Title 68 of the Illinois Administrative Code. It does not have to be dated immediately prior to permit submittal, but should be relatively recent enough to show existing **ownership** and current Property Index Numbers (PINs). Common items that should be shown on the Plat of Survey include:

- Total area in acres
- Boundary information, including length, bearing, and angle
- Location common name or address
- Legal description
- Parcel PIN
- Survey standard and benchmark information
- Easements, when applicable

RECORDING PLAN SHEET – EXHIBIT R

The recording plan sheet(s) make up Exhibit R, which is recorded with the Schedule R (see *Recording Submittal* under *Maintenance and Monitoring Plan Submittal Requirements* in the above section.) Exhibit R is intended to ensure the following systems, if applicable to the **project**, are permanently sustained and adequately maintained by future owners.

The Cook County Recorder of Deeds will not accept an Exhibit R that is smaller than 8.5" x 14" or larger than 30" x 36". The recommended size is 24" x 36", which is consistent with the other plan sheets required under a **Watershed Management Permit**.

The Exhibit R must include the following:

• The common address, legal description, and Property Index Number (PIN) of the parcel

- Location of all existing and proposed major stormwater systems, volume control practices, and/or detention facilities
- Reference to required maintenance agreement(s) for any offsite **major stormwater system**, **volume control practices**, **detention facilities**, and/or private sewer connections not located on the parcel to ensure they are linked to the permitted **project**
- Entire **ownership** area for phased **development** providing notice of **stormwater** detention storage requirements for undeveloped portions of a parcel now developed in part under the WMO
- Location of all **compensatory storage** areas provided to meet **District** mitigation requirements
- Location of all **wetland** and **riparian environment** mitigation areas provided to meet **District** mitigation requirements
- Location of all native planting conservation areas
- Location of all **qualified sewer**
- Type and schedule of **maintenance** activities to be performed on the existing and proposed systems, as indicated in the **Maintenance** and Monitoring Plan Submittal

Publicly financed projects are not required to record the Schedule R/Exhibit R, but must still provide the Exhibit R as part of the **Watershed Management Permit** submittal. Projects involving solely **qualified sewer** do not need to provide the Schedule R/ Exhibit R portion of the **Maintenance** and Monitoring Plan Submittal. However, when required for another reason, **qualified sewer** shall be made part of the Schedule R/Exhibit R.

POST-SUBMITTAL REQUIREMENTS

TERMS OF PERMIT/DENIAL – APPEAL

Upon receipt of a complete **Watershed Management Permit** application, meeting the submittal requirements set forth in the previous sections, the **District** or relevant **Authorized Municipality** may do any of the following:

- Request clarifications or revisions from the **applicant**
- Issue the Watershed Management Permit
- Issue the Watershed Management Permit with special conditions
- Deny the Watershed Management Permit application

Written comments requesting clarification or revision are transmitted to the design engineer within the timeframes specified in §1401.2 or §1402.2.F of the WMO. Once the **Watershed Management Permit** is issued, notification is sent to the **Permittee**, the **Co-Permittee**, the design engineer, and the **District** Field Inspectors.

Special Conditions that are made part of the **Watershed Management Permit** are generally considered to remain in effect for perpetuity. However, some Special Conditions require document submittal or testing within a set time period. These Special Conditions must be met prior to obtaining the RFI for permit close-out. Should an **applicant** wish to appeal a special condition or permit denial, they should follow the provisions of <u>Article 13</u> of the WMO and this **TGM**.

CONSTRUCTION TIMELINE REQUIREMENTS

Construction activities under a **Watershed Management Permit** must be initiated within one (1) year of permit issuance. If construction has not started within one (1) year, the permit may be considered null and void. To avoid this, a request for extension may be submitted to keep the **Watershed Management Permit** active.

Construction activities must be complete within three (3) years of permit issuance for WMO Permits, FCA, SFHA Permits, and Permit Revisions, and two (2) years for NRIs. Earthwork Permits expired based on the required submittal of the related WMO Permit, as listed on the Earthwork permit application. If construction is not complete within the appropriate expiration date, a request may be made to the **District's** Field Office or **Authorized Municipality** who originally issued the **Watershed Management Permit** for a time extension.

For publicly financed projects that experience delay due to court proceedings, the one (1) year period to start construction will be considered from the date of final court action.

The **District** or **Authorized Municipality** will review all requests to determine if a time extension is warranted and if the **Watershed Management Permit** should remain active. Additional information on Permit Extensions is found in the following section.

PERMIT EXTENSIONS

Watershed Management Permits have expiration dates, as listed above. To avoid rendering a permit null and void, the **applicant** may send a request for Permit Extension. An extension may be granted for an additional year to start construction. In some circumstances, an additional one (1) year extension may be granted. Regardless of when construction commences, all construction must be complete within three (3) years of the permit issue date for WMO Permits, FCAs, SFHA Permits, and Permit Revisions. All construction must be complete within two (2) years for NRIs, and Earthwork Permits have an expiration tied to the receipt of a full WMO Permit.

Once construction has begun, an extension is not required unless construction will not be completed within three (3) years of the permit issue date. Requests for permit extensions in these scenarios should be directed to the **District's** Field Office.

Extensions to the above expiration dates may be granted by the **District** or **Authorized Municipality** that originally issued the **Watershed Management Permit**. The **applicant** shall submit written request for consideration. Each case will be evaluated to determine if an extension should be granted. Extensions are generally granted in one-year increments, unless specified otherwise in the written request.

Approval of Plan Revisions

After issuance of a **Watershed Management Permit**, all **material revisions** to the plans, Schedules, or permit forms require approval of either the **District** or the **Authorized Municipality** that originally issued the permit. The **applicant** shall submit a written request for approval, along with the revised plans, Schedules, and permit forms. Submittal requirements for a Permit Revision are detailed under the *Permit Revision* permit type section in this Article of the **TGM**.

Should the **District** or the **Authorized Municipality** determine that the revised plans are in compliance with the current WMO requirements, the Permit Revision will be issued and the revised work may commence. Construction of revised work without an approved Permit Revision is deemed construction without a permit and is subject to violation, per <u>Article 12</u> of the WMO.

If the **material revisions** to the permit are minor in nature, they may be approved via a Field Change, and documented on the Record Drawings. The **District's** Field Office staff or the **Authorized Municipality Enforcement Officer** may issue Field Changes that do not require a formal Permit Revision. Fees associated with Field Changes shall be paid prior to issuance of the RFI.

Record Drawings

Upon completion of construction, **record drawings** must be prepared, signed, and sealed by a **professional engineer** or professional land surveyor, and shall represent the final "as-built" conditions of topography, elevations, **structures**, **major stormwater systems**, **volume control practices**, **detention facilities**, **compensatory storage**, **flood protection areas**, and **qualified sewer**. All **record drawings** must contain benchmark information and reference a vertical datum. Calculations for as-built storage volumes must also be included as part of the **record drawing** submittal, and must be signed and sealed by a **professional engineer**.

The submittal shall include four copies of the **record drawings** and must be submitted prior to or concurrently with the Request for Final Inspection (RFI). The **record drawings** shall be sent to the **District** or **Authorized Municipality** that originally issued the **Watershed Management Permit**. Submittals to the **District** should be directed to the Local Sewer Systems Section Field Office at the following address:

Metropolitan Water Reclamation District Local Sewer Systems Field Office Stickney Water Reclamation Plant 6001 West Pershing Road Cicero, IL 60804

When construction activities include a direct connection to or modifying/replacing/relocating **District** infrastructure, or similar activity, the following items must be submitted to the **District** with the RFI:

- Six (6) copies of **record drawings** and with rim, invert, and other relevant dimensions and elevations. All elevations shall reference North American Vertical Datum of 1988 (NAVD 88).
- A compact disk (CD) containing a shape file with the as-built GPS coordinates and all rim, invert, and other relevant dimensions and elevations. All GPS coordinates shall reference Illinois State Plane North American Datum 1983 (NAD 83) and all elevations shall reference North American Vertical Datum of 1988 (NAVD88).

If it is determined that the constructed grades, geometries, storage volumes, or inverts are not in conformance with the approved plans, the **applicant** shall be responsible for any modifications required to bring the **project** in compliance with the WMO.

RECORDING OBLIGATIONS

Per §307.1 of the WMO, the **applicant** is responsible for ensuring the Schedule R and Exhibit R are recorded with Cook County. The as-built Exhibit R is the version that must be recorded. If there are no changes during construction, the originally approved Exhibit R may be recorded. The recording submittal must meet the requirements of Cook County, as indicated above.

Recording occurs after construction is substantially complete. An as-built Exhibit R should be prepared, showing any changes from the originally approved Exhibit R. The Recordation Submittal must meet the recording requirements set forth by Cook County. The **District** has no influence on the policies and procedures of Cook County, and can only provide guidance based on past recording experience. At the time of this writing, the following must be submitted to Cook County in order to record the Schedule R/Exhibit R:

- One (1) originally signed Schedule R attached to the as-built Exhibit R
- Seven (7) photocopies of the Schedule R and as-built Exhibit R
- A full legal description with PINs attached to each Schedule R in at least 12-point font
- Contact information and address to send the recorded copy
- Any recording fees required by Cook County

Upon recordation, one (1) copy of the recorded documents must be sent to the **District's** Local Sewer Systems Section Field Office, located at the Stickney WRP. The RFI for the permit will not be issued until the recorded Schedule R/Exhibit R is received. At such time, the **District** will initiate refund procedures for the Recordation Deposit.

At the expense of the **applicant**, the **District** may record the Schedule R/Exhibit R as a last resort prior to pursuing a violation for not meeting the above requirement.

There are instances in which the entire **Watershed Management Permit** may be recorded against the property. Cases of this include **Sole Permittee** permits, permits with no stormwater **permittee**, or any other reason indicated by the **Director of Engineering**.

The obligations imposed under the recorded documents shall continue in perpetuity, or until the property is redeveloped under a new **Watershed Management Permit**.

TGM ARTICLE 3 REVISION TABLE

No.	Revision Description	Date
0	Original TGM	5/1/2014
1	Schedule applicability, sole permittee requirements, flowchart/checklist updates	8/1/2015
2	Revision table, remove flowcharts/checklists, Amendment updates, rewrite	10/16/2018
3	Amendment edits, definition changes	5/31/2019