

**ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL
REQUIREMENTS**

Sec. 500 General Requirements

500.1 Stormwater Management and Other Permits Required

A Stormwater Management Permit shall be required if:

- a. The development or a substantial improvement is located in the regulatory floodplain or there is regulatory floodplain within the property boundary; or
- b. Any land disturbing activity to be performed in a water course or water body; or
- c. Fill that will exceed three (3) feet in vertical height at its highest point measured from the natural ground surface where such fill violates the purpose or objectives of this ordinance, as determined by the permitting authority; or
- d. Any land disturbing activity requiring a site runoff storage facility; or
- e. The development disturbs more than 43,500 square feet of ground cover, unless the development solely involves one or more of the following:
 1. Installation, renovation, or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
 2. Maintenance, repair, or at grade replacement of:
 - a. existing lawn
 - b. garden or cultivated areas
 - c. residential drivewaynot otherwise requiring a stormwater permit under this Ordinance; or
 3. Maintenance of an existing stormwater facility, not requiring other state or federal permits or approvals.
 4. Excavation below final grade for tanks, vaults, tunnels, swimming pools, cellars, or for basements and/or footings of a single-family residence and appurtenant structures on a site that is part of an engineered and final platted subdivision or for which a building permit has been issued by the permitting authority, unless the site would otherwise require a Stormwater Management Permit.
 5. Public Roadway or Bridge projects; consisting of improvement to an existing public roadway or public bridge sponsored by a public roadway agency and contracted as a public bid project.

The following activities shall be exempt from this ordinance and shall not require a stormwater management permit.

1. Tilling of the soil for fire protection purposes.
2. Engaging in the following only if in connection with a farming or other agricultural or conservation enterprise, purpose, or use and only if there is no placement of fill within the floodplain:
 - a. Construction of sod waterways;
 - b. Construction of terraces;
 - c. Construction of surface water diversions (but not across watershed boundaries);
 - d. Construction of grade stabilization berms or systems; or
 - e. Tilling of the soil.
 - f. The implementation of conservation measures included in a farm conservation plan approved by the Kendall County Soil and Water Conservation District.
3. Agricultural use of land and development on un-platted residentially zoned property larger than three acres in size, except that the and/or paved surfaces with an impervious area totaling more than 43,560 square feet and construction of any structure(s) or any substantial improvement to a building within the floodplain shall require a Stormwater Management Permit.

All development shall secure all Federal, State, Regional and local approvals, including, without limitation, an IDNR-OWR Floodway/Floodplain Construction permit, a USACOE permit and an IDNR-OWR Dam Safety permit if required, meeting all Federal, State, Regional and local approvals prior to the issuance of a Stormwater Management Permit for proposed work and areas of a site requiring such other approvals.

500.2 Permit Review Fees

All permit fees shall be paid at the time of application. Permit fees shall be established by separate resolution of the permitting authorities. Fees may include, but are not limited to, the cost of permit administration, review and inspections prior to construction, during construction and within the permanent cover establishment period following construction.

500.3 Professional Seals and Certifications Required

- a. The design of stormwater facilities, calculations for the determination of the regulatory floodplain, or calculations of the impacts of development shall meet the standards of this Ordinance and shall be prepared, signed, and sealed by a Professional Engineer. The Professional Engineer shall provide an opinion that the technical submittal meets the criteria required by this Ordinance or the applicable certified community ordinance; and

- b. For flow control / containment dams, walls, weir or devices (not including earth embankments) that are subject to a differential water pressure greater than 3 feet the submittal shall include evidence that the subject design has been reviewed by a qualified professional who shall, as a minimum, have registration as a Professional Engineer. Such reviews shall include stability of the dam, wall, weir or device under design conditions considering the protection of downstream life and property in the event of a failure. When directed by the Administrator the calculations submitted for such dam, wall, weir or device shall be reviewed, signed and sealed by a Registered Structural Engineer.

For projects which include earth embankments which are subjected to differential water pressure the submittal shall include evidence that the embankment design and construction specifications are adequate for the design conditions. This review shall include consideration of the existing foundation soils for the embankment, the materials from which the embankment is to be constructed, compaction requirements for the embankment and protection of the embankment from failure due to overtopping. Construction and materials specifications for all such embankments shall be included with the plan set submittal. When directed by the Administrator, or when the impounded water pressure differential exceeds three feet, or when appropriate considering the volume impounded and water surface elevation differential to which the embankment is subjected, these calculations may be required to be reviewed, signed and sealed by a qualified Geotechnical or Structural Engineer;

- c. A topographical map of the site, record drawings, and other required drawings shall be prepared, signed, and sealed by a Professional Land Surveyor or Professional Engineer and tied to North American Vertical Datum, 1988 adjustment and any FEMA benchmarks.

Sec. 501 Duration and Revision to Permits

501.1 Permit Expiration

Permits shall expire and become null and void if the work authorized by the permit has not been commenced within 365 days from the date of Permit issuance. Permits expire December 31 of the third year following the date of permit issuance or upon expiration of state or federal permits required for any development activities.

501.2 Permit Extension

If the permitted activity has been started but is not completed by the expiration date of the permit, and the permittee intends to pursue the permitted activity, then the permittee may submit a written request that the expiration date be extended. Upon receipt of such request, the Administrator may extend the expiration date in one-year increments a maximum of 3 times for permitted activities outside regulatory floodplains and floodways. Expiration dates for permitted activities in regulatory floodplains and floodways may be extended in one-year increments a maximum of 3 times provided the activity is in compliance with the then current requirements of this Ordinance or the applicable Certified Community Ordinance.

501.3 Permit Revision

If, after permit issuance, the permittee decides to revise the approved plans, the permittee shall submit revised plans to the Director or the Administrator, along with a written request for approval. If the Director or the Administrator determines that the revised plans are in compliance with the then current requirements of this Ordinance or the applicable Certified Community Ordinance, an approval of the revised plans may be issued.

Sec. 502 Required Submittals

All permit submittals shall include the material listed in the Sections noted in Table 502 for the applicable type of development, unless the submittal requirements are specifically modified by the procedure in Section 502.1.

Table 502 Required Submittals (refer to Sections listed for specific material)							
Section No. / Description							
	502.2	502.3	502.4	502.5	502.6	502.7	502.8
	Application and Project Overview Plan	Erosion Control Plan Set Submittal	Engineering Plan Set Submittal	Stormwater Submittal	Floodplain Submittal	Performance Security	Maintenance Schedule and Funding
All Development Requiring a Permit	X	X					X
All Development Requiring Detention/Retention	X	X	X	X		X	X
All Development Requiring a Permit > 20 ac.	X	X	X	X		X	X
All Developments on Sites with Floodplains	X	X	X		X	X	X
All Applications Requesting Variances	X	X	X	X	If on site	X	X

502.1 Modification of Submittal Requirements

The Administrator may, at his discretion, modify the submittal requirements on a case-by-case basis considering the size, complexity and likelihood that a development will affect the discharge of stormwater. Such modifications may increase or decrease the submittal requirements noted above. The Administrator’s shall note in writing the specific submittal requirements and relevant findings to support the modified requirements.

502.2 Application and Project Overview Plan

All applicants for a stormwater permit shall provide the following information as a minimum, on forms or in a format approved by the Administrator:

Application:

- a. The name and legal address of the owner(s) of the site and the permit applicant; and
- b. The common address, legal description, property identification number (PIN) of the site; and
- c. The name of the project, area of the site in acres, type of development; and

- d. A general narrative description of the development, existing and proposed conditions, stormwater management practices being employed and project planning principles considered, including Best Management Practices used; and
- e. Affidavits signed by the owner or the applicant's authorized representative attesting to their understanding of the requirements of this Ordinance or the applicable Certified Community Ordinance and their intent to comply therewith; and
- f. A statement of opinion by a qualified person either denying or acknowledging the presence of floodplain on the development site; and
- g. Copies of other stormwater related permits or permit applications by other jurisdictions or agencies; and
- h. An engineer's estimate of probable construction cost of the stormwater facilities.

Project Overview Plan:

- a. A location map or description providing township, range, and nearest roadways to accurately locate the development site; and
- b. Acreage and zoning of property area; and
- c. Property area lines and dimensions including rights-of-way, easements, and setback lines; and
- d. Existing and proposed site conditions including all buildings, roads, impervious surfaces, and ground elevations where site grading is proposed; and;
- e. Proposed limits and restoration of disturbed areas; and
- f. Existing and proposed drainage features such as culverts, conduits, swales, streams, ponds, wetlands, etc. ; and
- g. Location and report of on-site subsurface drains and tiles and all off-site drain tiles (upstream or downstream) potentially impacted by the development; and
- h. Location of wells, septic systems, water mains, and sanitary sewers;

502.3 Erosion Control Plan Set Submittal

All applicants for a stormwater permit shall submit a Sediment and Erosion Control Plan meeting the requirements of Article 3, Section 301 and such submittal shall be accompanied by a Notice of Intent for Construction Activities as well as a Stormwater Pollution prevention Plan as required by current NPDES regulation.

502.4 Plan Set Submittal

All applicants required to submit a Plan Set in accordance with Table 502 shall provide the following basic plan exhibits: Site Topographic Map, General Plan View Drawing, Sediment/Erosion Control Plan, and a Vicinity Topographic Map. Each exhibit may be on more

than one drawing for clarity. The specific information to be included on each exhibit shall be as noted below.

- a. Site Topographic Map meeting the following requirements shall be submitted:
 1. Map scales as 1 inch = 100 feet (or less) and accurate to +/- 0.5 feet; and
 2. Existing and proposed contours on-site and within 100 feet of site; and
 3. Existing and proposed drainage patterns and watershed boundaries; and
 4. Delineation of pre-development regulatory floodplain/floodway limits; and
 5. Delineation of post-development regulatory floodplain/floodway limits; and
 6. Location of cross-sections and any other hydrologic/hydraulic computer modeled features; and
 7. Location of all on-site drain tiles and all off-site drain tiles (upstream or downstream) potentially impacted by the development; and
 8. Location of all wells, septic systems, water main, sanitary sewer and storm sewers; and
 9. Boundary of all wetlands, lakes, ponds, etc. with normal water elevation noted; and
 10. Location of all existing buildings and those to remain on the site noted; and
 11. Nearest base flood elevations; and
 12. FEMA and any site-specific benchmarks (tied to County benchmarks) used; and
 13. Highlight all contours used in the calculation of depressional storage.
- b. General Plan View Drawing meeting the following requirements shall be submitted:
 1. Drawing at the same scale as the Site Topographic Map; and
 2. Existing major and minor stormwater systems; and
 3. Proposed major and minor stormwater systems; and
 4. Design details for stormwater facilities (i.e. drainage system and outlet work detail drawings, etc.); and
 5. Scheduled maintenance program for permanent stormwater facilities including BMP measures; and

6. Planned maintenance access routes, tasks and schedule; and
 7. Identification of entities responsible for maintenance; and
 8. Permanent public access maintenance easements granted or dedicated to, and accepted by, a government entity; and
 9. Proposed regulatory floodplain and floodway location (with the base flood and flood protection elevations noted); and
 10. Highlight all plan areas at elevations below the 100-year high water elevation of site runoff storage facilities.
- c. Vicinity Topographic Map meeting the following requirements shall be submitted.
1. Vicinity topographic map identifying all off-site areas draining to the development and downstream to the receiving intermittent or perennial stream. (A 2' contour map is preferred at a scale readable by the reviewer but a USGS Quadrangle map is acceptable); and
 2. Watershed boundaries for areas draining through or from the development; and
 3. Soil types related to hydrologic soils group, vegetation and land cover affecting runoff upstream of the site for any area draining through the site; and
 4. Location of development site within the major watershed(s); and
 5. Show the overland flow path from the downstream end of the development to the receiving intermittent or perennial stream.

502.5 Stormwater Submittal

All applicants required to submit a Stormwater Submittal in accordance with Table 502 shall provide a narrative discussion and calculations to support a finding that the proposed development complies with the technical requirements of the permitting authority's ordinance. The submittal shall consist of, at a minimum, the following material.

- a. A narrative description of the existing and proposed site drainage patterns and conditions. Include description of off-site conditions, which help to identify stormwater issues considered in the design.
- b. A schedule for implementation of the site stormwater plan.
- c. On-site and off-site runoff calculations which address the following:
 1. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for sizing major and minor systems; and

2. Cross-section data for open channels; and
 3. Hydraulic grade line and water surface elevations under design flow conditions; and
 4. Hydraulic grade line and water surface elevations under base flood flow conditions.
- d. Site Runoff Storage Calculations, which address the following:
1. Calculation of hydraulically connected impervious area and corresponding retention volume.
 2. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the allowable release rate.
 3. Documentation of the procedures/assumptions used to calculate on-site depressional storage.
 4. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the storage volume.
 5. Elevation-area-storage data and calculations for site runoff storage.
 6. Elevation-discharge data and calculations specifically related to the outlet control structure depicted in the plan.
 7. The General Plan View Drawing of Section 502.3(b) shall indicate all impervious areas including directly connected impervious areas.

502.6 Floodplain Submittal

The applicant shall obtain approval from IDNR-OWR and FEMA for those cases in which their permitting authority applies or as noted in Article 4 of this Ordinance. The Stormwater Management Permit will not be issued until such approval is received. Documentation supporting a finding that the proposed development is in compliance with Article 4 shall be submitted with the application. At a minimum, the following material shall be submitted for approval with the application.

- a. Regulatory floodplain boundary determination:
 1. Provide source of flood profile information.
 2. Provide all hydrologic and hydraulic study information for site-specific floodplain studies, unnumbered Zone A area elevation determinations, and floodplain map revisions.

- b. Floodway hydrologic and hydraulic analyses for the following conditions:
 - 1. Existing conditions (land used and stream systems).
 - 2. Proposed conditions (land used and stream systems).
 - 3. Tabular summary of 100-year flood elevations and discharges for existing and proposed conditions.
 - 4. Calculations used for model development.
 - 5. Hydraulic/hydrologic computer model input/output.
- c. Floodplain fill and compensatory storage calculations for below and above 10-year flood elevation up to the base flood elevation:
 - 1. Tabular summary for below and above 10-year flood elevation of fill, compensatory storage, and compensatory storage ratios provided in proposed plan.
 - 2. Cross-sections used for the above calculations.
- d. Flood proofing Measures:
 - 1. Narrative discussion of flood proofing measures including material specifications, calculations, and design details, operation summary.
- e. Flood Protection Easements when required by this Ordinance or the applicable Certified Community Ordinance.

502.7 Performance Security

Performance security in accordance with Article 12 shall be required for any constructed land improvements or temporary erosion control measure prior to permit issuance.

502.8 Maintenance Plan, Schedule and Funding

A comprehensive maintenance plan for the Stormwater Management Facilities, Floodplain / Floodway protection or Natural resource Protection Areas, in accordance with Article 6 shall be submitted including identification of the entity responsible for maintenance, primary funding and back-up funding sources for maintenance in accordance with Article 6.

Sec. 503 Record Drawings

The developer is required to submit record drawings of all permitted stormwater management facilities including but not limited to storm sewers, culverts, overland flow paths and stormwater management basins. The record drawings shall include the following:

- a. The Record Drawings shall be in the same format and include the same sheet count as the approved permitted engineering plans. Supplemental topographic plans may be added to better detail stormwater management basins or overland flow paths. Submittal of Record

drawings shall be on such media and in such format as the Certified Community determines.

- b. All storm sewers and culverts shall depict actual location and elevation of all pipe inverts at all manholes and end sections. Rim elevation of all storm sewer frames and grates shall be noted. Pipe material and size shall be noted. All sump pump location and connections shall be noted.
- c. All pipe slopes shall be calculated based on constructed elevations and lengths. The approved slope shall be crossed out and the record slope noted adjacent to the approved slope.
- d. All design cross sections shall be surveyed and record elevation and widths noted. Overland flow path slopes shall be surveyed and record elevation and locations noted. Design water surface elevations shall be calculated where cross section area or slope is less than the approved plan.
- e. Stormwater management basins and floodplain compensatory storage shall be surveyed and a one foot topographic map provided. The flow control structure shall indicate type, size and elevation of the control device. Overflow measures such as control weirs, etc, shall be surveyed noting material, location, width and elevation. The record drawings shall include calculations verifying that the volumes of detention and compensatory storage required in the permit have been provided. The calculations shall compare proposed to actual volumes at one foot elevation intervals.
- f. The plans shall be signed and sealed by a Professional Engineer who shall state that the project is constructed and will function in substantially conformance and with the approved and permitted plans and calculations.
- g. The plans shall identify the entity with current maintenance responsibility and the entity with future maintenance responsibility for stormwater management facilities including but not limited to:
 - 1. Stormwater Management Basins
 - 2. Storm Sewers
 - 3. Drainage Ditches
 - 4. Overland Flood Routes
 - 5. Wetlands and Natural Areas

The plans shall identify a schedule for transfer of maintenance responsibility and the status of funding for maintenance activities.

Sec. 504 Issuance or Denial of Permit and Appeal of Permit Denial

The Administrator shall either issue or deny a Stormwater permit within 30 calendar days of receiving a complete Permit application and all required submittals and fees, unless additional time is agreed upon by both the Administrator and the Applicant. Failure of the Administrator to respond in writing within 30 calendar days of the complete submittal shall be construed as approval of the Permit as submitted. Denial of a permit shall be provided to the applicant in writing and shall be accompanied by specific reasons for denial.

If a permit is denied, the applicant may appeal the Administrators decision to the Director provided such appeal is made in writing within 15 business days of the date of the notification of denial. Such appeal shall state the reasons for denial and provide responses demonstrating compliance with this ordinance (County Stormwater Management Ordinance) and Certified Community ordinance amendments as appropriate. If the permit denial is found to be based on non-compliance with a Certified Community ordinance amendment the Director shall not be required to respond. If the permit denial is based on non-compliance with this ordinance only (County Stormwater Management Ordinance) the Director shall render a decision to issue the Stormwater permit or uphold the Administrators denial of the permit. The Director shall render his decision within 30 calendar days of the appeal. Failure of the Director to respond in writing within 30 calendar days of the appeal shall be construed as approval of the Permit as submitted. Denial of a permit shall be provided to the applicant in writing and shall be accompanied by specific reasons for denial.

Upon denial by the Director, the applicant may file an appeal in writing within calendar 15 business days of the denial to the County Board. Such appeal shall state the reasons for denial and provide responses demonstrating compliance with this ordinance (County Stormwater Management Ordinance) and Certified Community ordinance amendments as appropriate. If the permit denial is found to be based on non-compliance with a Certified Community ordinance amendment the County Board shall not be required to respond. If the permit denial is based on non-compliance with this ordinance only (County Stormwater Management Ordinance) the County Board shall render a decision to issue the Stormwater permit or uphold the Directors denial of the permit. The County Board shall render his decision within 30 calendar days of the appeal. Failure of the County Board to respond in writing within 30 calendar days of the appeal shall be construed as approval of the Permit as submitted. Denial of a permit shall be provided to the applicant in writing and shall be accompanied by specific reasons for denial.