

STORMWATER QUALITY & QUANTITY CONTROL IN CONSTRUCTION APPLICATION

House Enrolled Act No. 1266 places time limits regarding the review process for construction plan reviews. In order to meet the time limits in the review of the Drainage Plan and the Storm Water Pollution Prevention Plan; the City of Plymouth needs to address the following Ordinances; the Storm Drainage and Sediment Control Ordinance #97-1690 and the Construction Site & Post Construction Stormwater Control Ordinance #2007-1939. Hence the following protocol has been established to expedite the review process addressing these requirements:

DEFINITIONS

- *Applicant* – is the person/entity who is providing the necessary information to the City for the permits to develop a site
- *Construction Activities* - include clearing, grading, and excavating.
- *Construction Plan* - means a written plan that:
 - presents information about a construction project and activities associated with the construction project;
 - includes a storm water pollution prevention plan that outlines how erosion and sedimentation will be controlled on the site of the construction project; and
 - must be submitted to a review authority as a condition of proceeding with the construction project under the general permit rule program established under 327 IAC 15-5 or the general permit.
- *Designer* – means
 - The designer for a Storm Water Drainage Plan shall be an Indiana Licensed Engineer, Architect, or Land Surveyor engaged in storm drainage design.
 - The Designer of a Storm Water Pollution Prevention Plan shall be a ‘trained individual’ in erosion control and pollution prevention as identified below.
- *Erosion* - means the detachment and movement of soil, sediment, or rock fragments by water, wind, ice, or gravity
- *General Permit* - refers to the general permit issued by the commissioner or the department in accordance with 40 CFR 122.26 to establish erosion and sediment control requirements for construction sites.

- *Large Construction Activity Site* - means:
 - a site at which construction activities result in land disturbance of at least five (5) acres; or
 - a site:
 - at which construction activities result in land disturbance of more than one (1) but less than five (5) acres; but
 - that is part of a larger common plan of development or sale in which construction activities will ultimately result in land disturbance of more than five (5) acres.

- *MS4 Community* - means a county, city, or town that:
 - owns, operates, or maintains a regulated municipal separate storm sewer system (MS4); and
 - administers a program under which construction plans relating to construction projects in locations within the boundaries of the MS4 community are reviewed and given a favorable or unfavorable determination.

- *Project Site Owner* - means the person required to comply with 327 IAC 15-5, the general permit, or the applicable ordinances of an MS4 community with respect to a construction project. The term includes the following:
 - A developer.
 - A person who has financial and operational control of construction activities and construction project plans and specifications, including the ability to make modifications to those plans and specifications.

- *Review Authority* - means either of the following:
 - A soil and water conservation district or another entity designated by the department.
 - An MS4 community, in the case of a construction project in a location within the boundaries of the MS4 community.

- *Sedimentation* - means the settling and accumulation of unconsolidated sediment carried by storm water runoff.

- *Small Construction Activity Site* - means:
 - a site at which construction activities result in land disturbance of at least one (1) but less than five (5) acres; or
 - a site:
 - at which construction activities result in land disturbance of less than one (1) acre; but
 - that is part of a larger common plan of development or sale in which construction activities will ultimately result in land disturbance of at least one (1) but less than five (5) acres.

- *SWPPP* – means Storm Water Pollution Prevention Plan
- *Trained Individual* - means an individual who is trained and experienced in the principles of storm water management, including erosion and sediment control, as demonstrated by:
 - the completion of course work;
 - state registration;
 - professional certification; or
 - annual training; that enables the individual to make judgments concerning storm water management, storm water treatment, and storm water monitoring
- *Very Small Construction Activity Site* - means a site at which construction activities result in land disturbance of less than one (1) acre.

SUBMISSION OF A PLAN

- The Storm Water Drainage Plans and the Storm Water Pollution Prevention Plans shall be treated as two separate sets of plans. Referencing between the two plans is not permitted.
- Submissions of either the Drainage Plan or the SWPPP shall be made at the Clerk-Treasurer’s Office. The submission shall be a hard copy and an electronic copy of the plan including all of the required associated documentation along with the appropriate Review Fees.
 - Drainage Plan
 - Drainage Plan Application
 - Drainage Application Review Checklist
 - Drainage Plan Review Fees Calculation & Payment
 - Design
 - Drainage Plan Report
 - Drainage Plan Calculations
 - Drainage Plan & Detail Drawings
 - Drainage Plan Itemized Cost checklist
 - Storm Water Pollution Prevention Plan
 - SWPPP Application
 - SWPPP Application Review Checklist
 - SWPPP Application Review Fees Calculation & Payment
 - Design
 - SWPPP Report
 - SWPPP Plan & Detail Drawings
 - Drainage Plan Itemized Cost checklist

PLAN REVIEW FEES

- In order for the submission to be considered for review it shall be accompanied by the appropriate review fee as calculated per Ordinance 2018-2318 An Ordinance Regarding Various Fees for the City of Plymouth.

- The Applicant shall calculate the fees as outlined in the Drainage Application – Part 3 Invoice and/or the SWPPP Application – Part 3 Invoice.
 - The Drainage fee is based upon the Construction Site Area with the
 - Construction Site Area being defined as the size of the site minus the area of permanent buildings remaining on the site. Note: the size of the site may include multiple parcels.
 - The SWPPP fee is based upon the Construction Limits Area with the
 - Construction Limits being defined as the boundary within which all construction, materials storage, grading, landscaping and related activities shall occur. If the construction limits are not shown on the site drawing the entire site shall be used as construction limits.

REVIEW TIME LIMITATIONS

The City of Plymouth must make a preliminary determination whether the construction plan is substantially complete before the end of:

- the tenth (10) working day after the day on which the construction plan was submitted to the review authority, in the case of a small or very small construction activity site; or
- the fourteenth (14) working day after the day on which the construction plan was submitted to the review authority, in the case of a large construction activity site.
 - Once the above preliminary determination is approved, the project site owner may submit a notice of intent letter including the information required by 327 IAC 15-5-5 or the general permit and, forty-eight (48) hours after submission of the notice of intent letter, may begin the construction project, including the land disturbing activities of the construction project.
 - If the City of Plymouth has not notified the owner after 10-14 working days of the above preliminary determination; the project site owner may submit a notice of intent letter including the information required by 327 IAC 15-5-5 or the general permit and, forty-eight (48) hours after submission of the notice of intent letter, may begin the construction project, including the land disturbing activities of the construction project.
 - If the preliminary determination is that the construction plan is not substantially complete. The project site owner may not submit a notice of intent letter until the review authority makes a conclusive favorable determination concerning the construction plan under 327 IAC 15-5, the general permit, or the applicable ordinance of the City of Plymouth. At this time the 10-14 day requirement become null & void and a 30 day review period is in effect from the time of the most recent submittal.
 - If the City of Plymouth makes a preliminary determination that the construction plan is substantially complete; and later makes a conclusive unfavorable determination concerning the construction plan under 327 IAC 15-5, the general permit, or the applicable ordinance of the City of

Plymouth. The construction project must stop when the review authority notifies the project site owner of the review authority's conclusive unfavorable determination concerning the construction plan. At this time the 10-14 day requirement become null & void and a 30 day review period is in effect from the time of the most recent submittal.

DRAINAGE PLAN REQUIREMENTS

The requirements for the drainage plan may be found in the Storm Drainage and Sediment Control Ordinance # 97-1690 on the City's website at plymouthin.com. The Drainage Application Checklist (Part 2) is a general summary outline of the above ordinance.

Please note the following clarifications to the ordinance:

- Stormwater Retention
 - If there is a proposed storm water retention pond located within 10,000 foot from the Plymouth Airport AOA, it is within a Hazardous Wildlife Attractants Setback Zone. As a City, we are taking reasonable steps to minimize the Hazardous Wildlife Attractants in this zone by minimizing pond retention and vegetation wildlife attractants within the City to meet the requirements of the Federal Aviation Administration (FAA) Advisory Circular 150/5200-33A. If a retention pond is present in this area the Owner is advised that if bird hits occur in the area around Plymouth Municipal Airport the FAA may require the owner to place a net or some type of bird repellants in the pond area. See the above mentioned Advisory Circular for details.
 - The Stormwater retention of 25 gallons per 100 square foot in excess above the detention requirements is not being utilized as stated in the drainage ordinance because of the Hazardous Wildlife Attractants Setback Zone above.
 - If Stormwater retention is required on a low property without an outlet the 24 hour – 100 year storm volume shall be calculated with no allowable release rate (extra storage volume is suggested). In order to insure that the retention area will not fill up once and become of no use. Infiltration and evaporation will need to be utilized to address the ponded water. Soil borings need to be taken to determine the infiltration rate of the soils in the area and determine the depth to the water table. Also, mechanical methods to repurpose the water or provide for irrigation and or aid evaporation. See the Hazardous Wildlife Attractants Setback Zone above.
- Stormwater Detention
 - If there is a proposed storm water detention pond located within 10,000 foot from the Plymouth Airport AOA, it is within a Hazardous Wildlife Attractants Setback Zone. As a City, we are taking reasonable steps to minimize the Hazardous Wildlife Attractants in this zone by minimizing pond detention and

vegetation wildlife attractants within the City to meet the requirements of the Federal Aviation Administration (FAA) Advisory Circular 150/5200-33A. It is our understanding that the detention ponds must be dry bottom (drained within 48 hours) and if moist soil conditions are present a concrete paver bottom must be placed. See the above mentioned Advisory Circular for details.

- The typical outlet flow rate is a 10 year undeveloped flow. However, many times the outlet flow must be reduced because of downstream restrictions. Contact the City of Plymouth-Engineering Dept. for the outlet flow rate.
- Calculate the required detention volume by iterating through different storm durations to provide the peak flow (which may or may not be the time of concentration).

- Marshall County Legal Drains
 - The Marshall County Surveyor and the Marshall County Drainage Board control the
 - access to the legal drain
 - permission must be received to outlet into a legal drain
 - The Marshall County Surveyor may revise the proposed outlet flows
 - over the bank flows from the developed property/detention area is not permitted
 - the outlet and emergency overflow shall flow through an inverted 'T' structure. See the Marshall County Surveyor for more information
 - retention pond and/or ponding of water are not permitted in the legal drain easement

 - The use of the legal drain maintenance easements.
 - The Marshall County Drainage Board must be contacted for any adjustment in the legal drain easement.
 - The legal drain easement generally extends
 - 75' from the top of the Bank in an open ditch section
 - 75' from the centerline of the pipe in a closed ditch section
 - Contact the Marshall County Surveyor as soon as you realize you will be working in or near a legal drain.

- Work /Construction in the 100 Year Floodplain
 - Contact the City of Plymouth Floodplain Administrator (Building Commissioner) regarding any planned work/construction in the 100 Year Floodplain. The Floodplain Administrator will be able to provide guidance regarding the requirements and the permits required.

STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

The requirements for the Storm Water Pollution Prevention Plan may be found on the City's website at plymouthin.com. The SWPPP Application Checklist (Part 2) is a general summary outline of the above ordinance.

SUBSTANTIALLY COMPLETE SUBMISSION REVIEW

Is a review of the submittal to identify that the essential information is present to perform a complete and proper Comprehensive Design Review. cursory checks of the design assumptions and the design may be performed during this review. This plan will rely heavily on all three parts of the Application.

COMPREHENSIVE DESIGN REVIEW

Is an in-depth review of the submittal after the substantially Complete Submission review. It concentrates on the Drainage Plan and/or the SWPPP concerning the construction plan under 327 IAC 15-5, the general permit, and/or the applicable ordinances of the City of Plymouth.

APPROVED by the Board of Public Works & Safety on June 24, 2019 (Effective July 1, 2019).