TECHNO-GRAM
002-2019
REVISED

DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT

SUBJECT: 100-year Stormwater Management Quantity Control

PURPOSE: To identify locations in Prince George's County where 100-year control is required and clarify the method of calculating 100-year flow rates.

SCOPE: This revised Technogram replaces and/or updates the 100-year stormwater management quantity control in accordance with Prince George's County Code and Prince George's County Stormwater Management Design Manual.

This Technogram supersedes the previous Technogram 002-2019 dated June 24 and July 5, 2019. The purpose of this Technogram is to identify locations within Prince George's County where 100-year stormwater management quantity controls are required and to clarify the method of calculating 100-year pre-development flow rates.

- The attached map defines certain watershed areas in **yellow.** These watersheds have known flooding; therefore, **100-year stormwater management control is required,** unless otherwise determined by Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) on a case-by-case basis. The design engineer shall evaluate downstream flooding. DPIE typically confirms the 100-year control requirement at the time of site development concept approval.

- The attached map defines certain watershed areas in **white.** These watersheds generally do not have existing flooded homes and structures; therefore, 100-year stormwater management control is not required, unless otherwise determined by Prince George's County DPIE on a case-by-case basis.

These maps are intended as a general guide in the decision-making process for 100-year stormwater management quantity controls; however, the County reserves the right to require or not require 100-year control on a project specific basis. Examples of this include, but are not limited to the following:

- Permits of a very minor nature resulting in negligible flow increases.

- Permit sites located in a watershed upstream of regional stormwater management pond that provides 100-year control for that drainage area.

- Permit sites adjacent to tidal streams.

The 100-year control map can also be accessed on the Prince George's County website:
https://www.princegeorgescountymd.gov/1352/SiteRoad-Plan-Review

Applicants are encouraged to coordinate with Prince George's County DPIE, Site/Road Plan Review Division, during the conceptual stage of the project to confirm 100-year control requirements.

PRE-DEVELOPMENT 100-YEAR FLOW CALCULATIONS:

Based on the Prince George's County Stormwater Management Design Manual, Section 5.2.4.3, the pre-development 100-year flow rate shall be calculated based on woods in good hydrologic condition for existing wooded areas and based on meadow in good hydrologic condition for existing pervious, existing impervious and existing agricultural areas. For example, if a redevelopment project has existing parking, roads or buildings, these impervious areas shall be considered meadow in good hydrologic condition when calculating pre-development 100-year flow rates. The intent of this requirement is for redevelopment projects to reduce 100-year flow rates downstream in flood-prone watersheds.

BACKGROUND:

The requirements for 100-year stormwater management control are stipulated in the following codes and manuals.

Prince George's County Code Part II:

- *Subtitle 32-178 Minimum Stormwater Control Requirements.*

  (a) The minimum control requirements established in this Section and the Maryland Design Manual and the Prince George's County Design Manual are as follows:
  (2) Attenuation of …the 100-year frequency storm evet for downstream flooding…are required according to the Maryland Design Manual and the Prince George's County Design Manual and all subsequent revisions…

(3) The Department has the authority to require more than the minimum control requirements specified in this Division if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from a proposed project.

Prince George's County Stormwater Management Design Manual:

- *Chapter 5 – Section 5.2.4.3:*
  100-year Storm Attenuation Sizing:
  Attenuation may be necessary to control flooding downstream. This is generally required when existing homes or buildings downstream of the site are affected by the 100-year floodplain and/or known flooding; and

- *Chapter 5 – Section 5.2.6.1:*
  Quantity control of the 100-year storm may be required at the discretion of DPIE if the downstream analysis indicates that:

  A. Previous flooding has occurred; or

  B. Houses would be within 25 feet of the floodplain; or

  C. Buildings other than houses would be within the 100-year floodplain.

Attachment

APPROVED BY:

Melinda Bolling, Director

September 13, 2019