

## COMMUNITY PLANNING & DEVELOPMENT

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# ON-SITE DETENTION DESIGN REQUIREMENTS

## GENERAL REQUIREMENTS

This guidance applies only to projects that meet the thresholds specified below in "Is On-site Detention Required for My Project?" if all of the on-site stormwater BMPs included on List #1 and List #2 are determined to be infeasible for roofs and/or other hard surfaces.

## IS ON-SITE DETENTION REQUIRED FOR MY PROJECT?

**YES**, if my project:

1. Results in 2,000 square feet, or greater, of new plus replaced hard surface area, or
2. Has a land disturbing activity or 7,000 square feet or greater, or
3. Results in a **net increase** of impervious surface of 500 square feet or greater.

AND

1. All of the on-site stormwater BMPs included on List #1 and List #2 are determined to be infeasible for roofs and/or other hard surfaces, and
2. Drainage from the site will be discharged to a storm and surface water system that includes a watercourse or there is a capacity constraint in the system.

**NO**, if my project:

1. Results in less than 2,000 square feet of new plus replaced hard surface area, and
2. Has a land disturbing activity less than 7,000 square feet, and
3. Results in a **net increase of less than 500 square feet** of impervious surface area.
4. The project discharges **directly** to Lake Washington, or findings from a ¼-mile downstream analysis confirm that the downstream system is free of capacity constraints.

## DESIGNING YOUR ON-SITE DETENTION SYSTEM

All on-site detention system designs must be prepared by a professional engineer registered in the State of Washington. The Standard On-site Detention System worksheet (Attachment 1) must be submitted on 18" x 24" (minimum) size sheets.

**Construction that results in 500 to 9,500 square feet of new plus replaced impervious surfaces:** Size system according to Table 1. The configuration of the on-site detention system shall be as shown on Attachment 1 (Standard On-Site Detention Systems Worksheet) or as specifically designed by the engineer for the site.

**Note:**

- The applicant may pay a fee-in-lieu-of constructing an on-site detention system when allowed by the City Engineer. The fee will not be an option when in the opinion of the City Engineer, undetained runoff from the development may adversely exacerbate an existing problem (MICC 15.11) or if flow control is required by Minimum Requirement #7.
- **Construction that results in more than 9,500 square feet of new plus replaced impervious surfaces and/or exceeds a 100-year flow frequency of 0.15 cubic feet per second (for moderate and steep sloped sites greater than a 5% slope):** Size system according to Minimum Requirement #7 (Flow Control) in the Stormwater Management Manual for Western Washington (Ecology 2014).