

## Calculation of Permeable Paver's Storage Capacity

Project Name: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

Property Address: \_\_\_\_\_

Development/Property Name: \_\_\_\_\_

GMP Number: \_\_\_\_\_

Design Firm: \_\_\_\_\_

Design Engineer: \_\_\_\_\_ Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

KY PE No.: \_\_\_\_\_

MSD Reviewer: \_\_\_\_\_  
 WM No. \_\_\_\_\_

### Step A. Site Planning Recommendation

Define goals and primary function of permeable pavers based on the Permeable Pavers fact sheet in section 18.4.6. Refer to this section as needed throughout the remainder of this calculation sheet.

### Step B. Calculate the Water Quality Volume Required (VR) of water to be removed by permeable paver:

1. A = Contributing drainage area to permeable pavers: \_\_\_\_\_ ft<sup>2</sup>
2. RE = Required Water Quality Volume Rain Event in inches (minimum 0.6 in): \_\_\_\_\_ inches
3. I = Impervious cover of the contribution drainage area in percent: \_\_\_\_\_ %
4.  $VR^* = (1/12)(RE)(A)(0.05 + (0.009)(I)) =$  \_\_\_\_\_ ft<sup>3</sup>

### Step C. Calculate the Water Quality Volume Provided (VP), or storage capacity of permeable paver:

1. A = Area of permeable pavers: \_\_\_\_\_ ft<sup>2</sup>
2. p1 = porosity of base layer 1 (% void): \_\_\_\_\_ 40 %
3. d1 = depth of base layer 1: \_\_\_\_\_ ft
6.  $VP^{**} = (A)(p1)(d1) =$  \_\_\_\_\_ ft<sup>3</sup>

\*\* Note: This is a general formula and only applies if the paver surface and sub soil have a 0% slope. Refer to manufacturer's guidelines.

### Step D. Prepare exhibits A and B for long-term maintenance and operation agreement.

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