

Calculation for Proprietary Water Quality Units

Project Name: _____
Date Submitted: _____
Property Address: _____
Development/Property Name: _____
GMP Number: _____
Design Firm: _____
Design Engineer: _____ Telephone: _____ Email: _____
KY PE No.: _____

MSD Reviewer: _____ WM No. _____

Calculation of Proprietary Water Quality Units Storage Capacity

Step A. Site Planning Recommendation

Define goals and primary function of the Proprietary Water Quality Unit based on the Proprietary Water Quality Unit fact sheet in section 18.4.10. Refer to this section as needed throughout the remainder of this calculation sheet.

Step B. Determine water quality flow rate for unit from City of Indianapolis Stormwater Quality Unit Selection Guide _____ ft³/s

Step C. Calculate the Water Quality Volume Required (VR) of water to be removed by proprietary water quality units. Submit manufacturers documentation and specifications with this form:

1. C = runoff coefficient for the area draining to the proprietary water quality unit: _____
I = rainfall intensity for 15 minute, 1-year return frequency storm, 0.5 inches/hour for _____ inches
2. Louisville MSD _____ /hour
3. A = drainage area to the proprietary water quality unit in acres _____
4. Q_p = peak flow rate through proprietary water quality unit in cfs=C*I*A _____ ft³/s
or per pipe data from site plan for storm system

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

