Step A. Site Planning Recommendation
Define goals and primary function of intensive green roof based on the Intensive Green Roof Step by Step Design Procedures beginning on page 18.5.7-5 as well as Table 18.5.7-A. Refer to these sections as needed throughout the remainder of this calculation sheet.

Step B. Determine the Required Water Quality Volume Rain Event, RE_{WQV} in inches
(Refer to Chapter 18.3; A minimum depth of 0.6 inches must be used): __________ inches

Step C. Determine the total runoff volume and drainage
1. A = Contributing drainage area to green roof: __________ ft²
2. RE_{WQV} = Required WQ_{v} Rain Event in inches: __________ inches
3. I = Impervious cover of the contribution drainage area in percent: __________ %
   a. RV = 0.05 + 0.009 (I) = __________
4. WQ_{v} Required = (A/12)(RE_{WQV})(RV) = __________ ft³
   Note: The green roof total volume should be equivalent to the Required WQ_{v}
5. Calculate required volume of green roof based on the void space of the planting media and storage of the drainage layer so that it can store the WQ_{v} per Table 18.5.6-A.
6. Volume of water retained by green roof: __________ ft³
7. Is the volume of water retained by green roof greater than the WQ_{v} Required? __________
8. Proceed to step D.

Step D. Complete O&M documentation.

Additional Calculations and Explanation (Required if design deviates from calculation sheet):

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________________________________________________________________________

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

MSD Reviewer: ___________________________ WM No. ___________________________