

Suggestions to Promote Brevity of Designer's Drainage Analysis Submittals

The following items are suggested since they are commonly found items that result in an overproduction of paperwork.

- Whenever possible, please print double-sided.
- Please do not submit printouts of hydrographs, either in graphical or tabular form, unless the project or analysis involves addition of hydrographs with dissimilar times to peak, or unless specifically requested by RIDEM
- Please do not submit multiple copies of weighted curve number calculations and time of concentration calculations. Because the weighted curve number and the time of concentration do not change with the magnitude of the storm event that is being analyzed, it is sufficient to include only one copy of this information in the drainage report. Most drainage software programs have summary formats that can be used to submit information. It is advised that the full set of information be submitted for the 1-year storm, but please provide only summary sheets for the 1.2", 10-year, and 100-year storm event analyses.
- Please submit for the 1, 10, and 100-year 24-hour Type III storm:
 - the resultant peak runoff discharge rate
 - the time at which this rate occurs
 - the total runoff volume
 - the peak volume stored and peak elevation attained by that stored volume for each practice that involves a detention storage function
 - the peak exfiltration rate and total volume exfiltrated for all infiltration practices
 - pertinent primary, secondary, and (if applicable) tertiary discharge and runoff volume information.
- A summary of the 1.2" 24-hour Type III storm event (which produces the water quality volume) is also welcome as it is helpful in review of such design features as bypass structures and water quality and/or recharge practices. The water quality flow (WQ_r) calculation (see RISDISM Section 3.3.3.2) should be used for this storm event, or the split pervious /impervious feature, if available, can be used for this storm event).
- The only tabular printouts which need to be submitted are those related to elevation vs. storage vs. discharge. However, as these relationships do not change between storm events, only one set of these tables is needed in the drainage report.
- Instead of submitting repetitive calculations utilizing the same formulas, it is preferable to submit one initial calculation and to submit a summary table of inputs and results covering this initial calculation and all repetitive calculations that employ the same formula of analysis method. Be sure to provide all formulas, along with the definition of all input variables. This method of submittal will facilitate the review.
- Please do not provide copies of the following references. Rather, please refer to the citation and page number:
 - Sections of the *Soil Survey of Rhode Island, 2012* soil survey should be used. See RIDEM Environmental Resource Map (you may provide a printout that includes the site property lines and brief description of soil types).
 - Sections of the *Rhode Island Stormwater Design and Installation Standards Manual (RISDISM)*
 - Sections of the *Rhode Island Soil Erosion and Sediment Control Handbook (RISESCH)*.
 - RIDEM Wetlands Rules