

CONSULTING ENGINEERS
GENERAL MEMORANDUM NO. 14-04

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND
CONSTRUCTION
OFFICE OF ENGINEERING

Interim 24-hour Precipitation Rates

December 17, 2014

TO: CONSULTING ENGINEERS

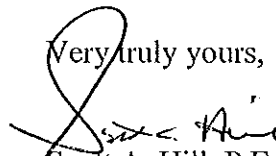
Precipitation rate information presented in the Drainage Manual is based on Technical Paper 40 (TP-40), a study prepared by the National Oceanic and Atmospheric Administration (NOAA), initially published in 1961. Since then, there have been great advances in technology and there is now over 50 years of precipitation data that has subsequently been collected.

The anticipated September 2015 release of Volume 10 of the "NOAA Atlas 14, Precipitation-Frequency Atlas of the United States", will replace the older precipitation data throughout the Northeastern States. It is anticipated the Drainage Manual will be revised to incorporate the "NOAA Atlas 14" precipitation rates, once that data becomes available.

In the interim, until direction is provided to begin using NOAA Atlas 14 data; designers developing hydrologic studies for the Department that make use of Natural Resources Conservation Service (NRCS) unit hydrograph methodology (e.g. TR-20, TR-55), are directed to assess the applicability of the 24-hour precipitation rates now available from the Northeast Regional Climate Center (NRCC)'s website "Extreme Precipitation in New York & New England" (Precip.net). The designer should compare the Precip.net values with Drainage Manual values, and ultimately use the values deemed to be more appropriate for the location being studied. If the Precip.net values are determined to be more appropriate, the precipitation distribution curves calculated from the website would be used instead of the standard NRCS 24-hour, Type III distribution.

The designer should include a statement in the hydrology report stating which values were selected and why they were considered to be the appropriate data set.

This direction applies to assignments which have yet to receive Hydrology Report approval.

Very truly yours,

Scott A. Hill, P.E.

Transportation Engineering Administrator
Bureau of Engineering and Construction