

**OFFICE OF HIGHWAY DEVELOPMENT
HIGHWAY HYDRAULICS DIVISION**

**Highway Drainage Manual Design Guidelines
Software**

I. Limits

The software listed herein have been approved for use as specified. The use of alternative programs is subject to approval by the Chief, Highway Hydraulics Division.

II. Hydrology

- NRCS WIN TR-20 – v 3.2 (2017)
- NRCS WIN TR-55 - v 1.00.10 (2013)
- Use NOAA Atlas 14 Rainfall Data in **all** cases

III. Culverts

- HY-8 Culvert Hydraulic Analysis Program – v 7.5 (FHWA 2016)
- HDS 5 Chart Calculator (2001)

IV. Storm Drains/Inlets

- SHA TVHG (SHA 1994)
- FHWA Hydraulic Toolbox v 4.4 (July 2018)

V. Stormwater Management

- SHARISER (SHA 2009)

VI. Streams

- HEC-RAS – V. 5.0.6 (USCOE 2018)