# Design Advisory

**From Art Green, Engineer of Design**

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Index:
OpenRoads Designer –
Drainage & Utilities

MDOT Drainage Manual
Section 7.4.9.7

*This advisory is superseded by any subsequent revisions to the references listed in this index.*

Questions regarding this Design Advisory should be directed to:

For Hydraulic Design Guidance contact:

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For Drainage & Utilities Software Support and Training contact:

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## OpenRoads Designer – Drainage & Utilities

This is to advise all designers that the Bentley OpenRoads Designer Drainage & Utilities software, version 2021 R1 with the MDOT 10.10 workspace configuration, is approved for use on MDOT Trunkline projects, for design of enclosed stormwater systems and ditch capacity analysis. The workspace configuration has been customized to meet MDOT drainage standards. A Guidance Document has been created on how to utilize the software within OpenRoads Designer and can be found at the following link: Drainage and Utilities - MediaWiki (state.mi.us).

MDOT flex tables that contain the assumptions and design parameters must be submitted as part of the Drainage Study. These MDOT flex tables have been set up in the workspace and are generated directly from the software.

Replace references to Geopak Drainage in Section 7.4.9.7 of the MDOT Drainage Manual with Drainage & Utilities.

There are certain conditions in which Drainage & Utilities software is not approved for use. These are:

1. Culvert Analysis
2. Watershed analysis using the SCS Method (drainage areas greater than 20 acres.)
3. Combining ditch (open) and storm sewer (closed) conduits in one network.

Refer to the MDOT Drainage Manual for design practices and/or software for these conditions.

Special care should be used when storm sewers are found to be either in supercritical or pressure flow. Refer to Chapter 7 in the MDOT Drainage Manual or contact the MDOT Hydraulics resource listed in the left column.