MaineDOT Policy on Electronic Exchange of CADD Data

General

This policy provides guidance on MaineDOT's specification for electronic data for design deliverables. Municipalities and consultants designing projects that will require submittal of files to MaineDOT for use in the right-of-way process shall deliver electronic data as specified in this document.

MaineDOT uses OpenRoads Designer (ORD) and InRoads, products of Bentley Systems. Graphical data shall be provided to MaineDOT in .DGN format. Roadway design data shall be submitted in a format that can be imported directly into ORD or InRoads without translation or loss of accuracy.

Electronic Deliverables to MaineDOT

Electronic CADD files shall be meet MaineDOT's standards, found on MaineDOT's CADD Support web page: https://www.maine.gov/mdot/caddsupport/. No translation of graphical or roadway design information by MaineDOT shall be required.

All .DGN files shall meet MaineDOT's conventions for Working Units, Global Origin, Level Structure and Naming, File Names, File Content and Referencing, Line Styles, Line Weights, Fonts, Cells, and Color Tables.

Roadway design data shall be provided in ORD as .DGN and .ITL files or in InRoads files [.DTM, .RWK, .ALG, .ITL, .IRD, .XIN], and/or LandXML format. MaineDOT's naming convention shall be used for all roadway design data files.

Either a municipality or its consultant is responsible for any translation and verification required to convert non-.DGN files to the current MaineDOT design file format, and roadway design files to the MaineDOT ORD or InRoads format, or to LandXML.

MaineDOT may reject any file transmitted that does not conform to these standards.

Consultants should install MaineDOT's CADD configuration as an alternative to their own. All ORD, InRoads and ORD resources – including seed files, cell libraries, line styles, fonts, macros, color table, settings manager files, and menus – are available from the CADD support web page referenced above, along with instructions for setting up MaineDOT's configuration on an existing CADD software installation. Provisions are available to switch easily between other configurations and the MaineDOT configuration.

Files may be submitted via MaineDOT's FTP site (ftp.mainedot.smartfile.com) contained in a .ZIP file, or written to portable data storage devices as individual files.

Once MaineDOT accepts the final signed and stamped plans, either a municipality or its consultant shall provide MaineDOT with the final electronic versions of all CADD files, roadway design files, and associated resource files on a portable data storage device. MaineDOT may request copies of final plan sheets in PDF format. The PDF files will serve as the electronic, read-only record plans, and they shall match all aspects of the final hard copy signed and stamped plans. *Electronic delivery items* **DO NOT** replace hard copy delivery items.

A Project Journal File shall accompany all electronic files submitted to MaineDOT, both those written to a portable data storage device and those transmitted via MaineDOT's FTP site. This document shall contain the town name, state work identification number (WIN), the date, and a list of the files being transmitted with a brief description of each file.

Portable data storage devices used to transmit electronic files to MaineDOT shall, at a minimum, be labeled with the town name, state WIN, and date. If more than one device is required to transmit the files, the label shall also include the device number and total number of devices of the set transmitted, (example, Drive 1 of 2).

MaineDOT Furnished Services and Information

MaineDOT will provide copies of the latest files used to configure, customize, and utilize ORD or MicroStation and InRoads in its own project development process to consultants through the MaineDOT CADD Support web page: https://www.mainedot.gov/caddsupport/

MaineDOT CADD support personnel are available to provide information and answer questions on MaineDOT CADD standards, ORD, MicroStation and InRoads setup, configuration, customization, and documentation. Contact information is available on the MaineDOT CADD Support web page.

MaineDOT's Survey Section will determine the horizontal and vertical datum to be used for each project located on a state highway. Files exchanged between MaineDOT and the consultant will reflect these data. Consultants using ORD or InRoads software can request the original MaineDOT ORD or InRoads survey model.

Standard reports created during the processing of survey data for input into ORD or InRoads are also available from MaineDOT. **Consultants are responsible for translating this data into other formats required for use in their design software.**