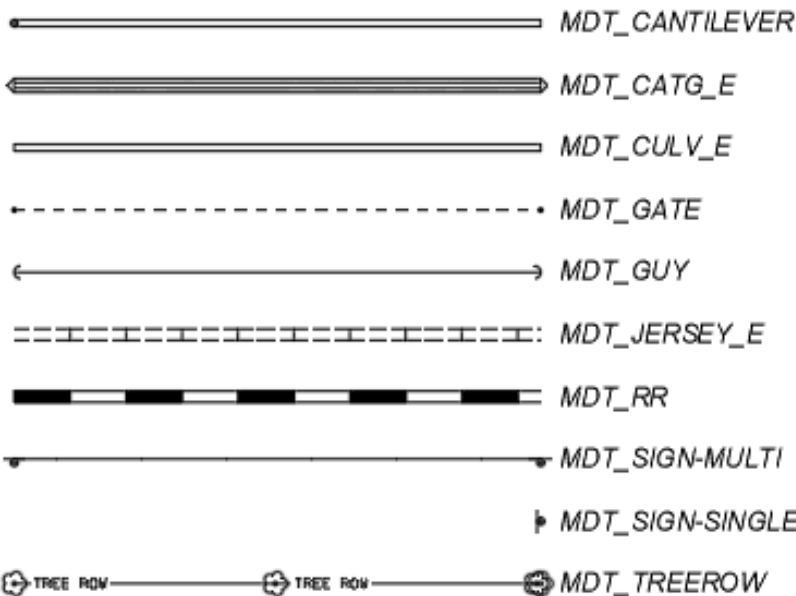


# LINETYPES PLOTTING INCORRECTLY

**ISSUE:**

Civil 3D files using DGN linetypes plot the lines as a continuous solid line rather than the intended line configuration at times. DGN linetypes are converted from Bentley and applied in the MDT Civil 3D State Kit to support appearance of 10 survey features and workflows as established in MicroStation/Power GEOPAK. Civil 3D linetype technology was not able to support redevelopment of linetypes with endcaps. DGN linetypes may be present with the following linetypes (corresponding survey codes in parentheses):

- |                        |                         |
|------------------------|-------------------------|
| MDT_CANTILEVER (SIGNC) | MDT_JERSEY_E (JRRL)     |
| MDT_CATG_E (CATGRD)    | MDT_RR (RRCL, RRR)      |
| MDT_CULV_E (CULVI)     | MDT_SIGN-MULTI (SIGNM)  |
| MDT_GATE (GATE)        | MDT_SIGN-SINGLE (SIGNS) |
| MDT_GUY (GUYWIRE)      | MDT_TREEROW (TREEROW)   |



Application/Tool(s):  
AutoCAD / Civil 3D

Version(s):  
13.6.2020.0 Civil 3D  
2024.4.3 Update

Environment:  
MDT Civil 3D State Kit  
r2024 v2.2.0

Released/Revised:  
7/1/2025

**SUPPORT**  
MDT Engineering  
Systems – CADD

[https://montana.servicenowservices.com/citizen?id=sc\\_cat\\_item&sys\\_id=13ac75551bc1091049e0ed3ce54bcb3d](https://montana.servicenowservices.com/citizen?id=sc_cat_item&sys_id=13ac75551bc1091049e0ed3ce54bcb3d)

## LINETYPES PLOTTING INCORRECTLY

### **SOLUTION:**

DGN converted linetypes can have trouble plotting when referenced. The DGN linetypes are introduced into the MDT Civil 3D State Kit start template drawings with a template reference. With MDT Civil 3D State Kit version 2.2.0, the DGNlinetypes.dwt drawing has been detached from design-start.dwt and survey-start.dwt start templates leaving the DGN linetypes copied in for continued use to resolve potential plotting issues.

The DGNlinetypes.dwt reference template can be detached for drawing files created prior to the MDT Civil 3D State Kit version 2.2.0 release.

### **PROCEDURE:**

- 1) *Launch* **CIVIL 3D MONTANA** and *open* the drawing with DGN linetypes having plotting issues.
- 2) From the “Manage” tab, *choose* **REFERENCE** on the “Styles” panel.
- 3) *Select* the **DGNLINETYPES** template then *choose* the **DELETE SELECTED TEMPLATES** button at the top of the “Attach Referenced Template” dialog.
- 4) *Choose* **APPLY** then **OK**.
- 5) Repeat plotting.

If plotting the linetype as displayed is still unsuccessful, additional steps are required as follows:

- 6) *Open* the **LAYER PROPERTIES MANAGER** (*Home tab > Layer Properties*).
- 7) *Sort* the layers by Linetype and *change* the linetype to **CONTINUOUS** for the layers using the linetype in question. *Take note of the layers edited.*
- 8) From the command line, *type* **PURGE**.
- 9) *Select* the linetype in question and *deselect* any items you’d like to remain in the drawing file.
- 10) *Select* options **PURGE NESTED ITEMS** and **ORPHANED DATA**.
- 11) *Choose* **PURGE CHECKED ITEMS**.
- 12) To reattach the DGNlinetypes template,
  - a. From the “Manage” tab, *choose* **REFERENCE** on the “Styles” panel.

## LINETYPES PLOTTING INCORRECTLY

- b. Choose the **ATTACH A NEW TEMPLATE** button at the top of the “Attach Referenced Template” dialog and navigate to the **DGNLINETYPES.DWT** file, e.g. C:\mdoh\StateKit\Civil 3D\2024\Linetypes\DGNlinetypes.dwt.

**Note:** Files of type: may need to be set to Drawing Template (\*.dwt)

- c. Once selected, choose **OPEN**.
- d. Choose **APPLY** then **OK**.

13) Open the **LAYER PROPERTIES MANAGER** (*Home tab > Layer Properties*).

14) Change the linetype back to the DGN linetype in question for the layers previously changed to Continuous above.

15) To detach the DGNlinetypes template again,

- a. From the “Manage” tab, choose **REFERENCE** from the “Styles” panel.
- b. Select the **DGNLINETYPES** template then choose the **DELETE SELECTED TEMPLATES** button at the top of the “Attach Referenced Template” dialog.
- c. Choose **APPLY** then **OK**.

16) Repeat plotting.