MONTANA

Department of Transportation

February 2025	MDT Civil 3D State Kit - Create Wall Surface

YOUTUBE VIDEO DOCUMENTATION

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OVERVIEW

Civil 3D cannot create a true vertical edge on a surface. This is a limitation of the application. While it is possible to *approximate* a vertical edge or face, Civil 3D provides no automation to do this. The **Create Wall Surface** command will automate the creation of a nearly vertical surface to simulate a wall-like feature. The command achieves this by adding a very slight horizontal offset from the bottom of wall to the top of wall. The resulting wall surface can then be added to another surface, used as a corridor target, or used for visualization.

The **Create Wall Surface** command is developed and provided by WisDOT.

COMPANION DOCUMENTATION

YouTube Video Link: https://www.youtube.com/watch?v=Kczw-fDqrac&list=PLxseor6I1x1GY4KNF_93eyCRSVeO61OwX&index=8|

USING THE COMMAND

This command requires a feature line, survey figure, or 3D polyline representing the bottom of wall breakline to be present prior to running the command.

1. Create or locate a feature line, survey figure, or 3D polyline representing the bottom of the wall breakline.
2. Type **MDTCreateWallSurface** at the command line or press the **Create Wall Surface** ribbon button.
3. Select the feature line, survey figure, or 3D polyline.
4. Pick side to offset. (Offset side will be the "high" side.)
5. Choose *[Height, Minimum Height, Elevation]*.
   a. *Height*
      i. The resulting top of the wall surface elevation will vary to achieve the specified height at all locations.
   b. *Minimum Height*
      i. The resulting top of wall surface elevation will be a constant elevation resulting in the specified minimum wall height.
   c. *Elevation*
      i. The resulting top of wall surface elevation will be at a constant elevation.
6. Enter top of wall value.
7. Enter name of surface.
8. The surface will be created.