

## MicroStation - WSDOT Custom Utilities

Environment: Expanded and 63 Levels

### Overview

WSDOT CAE provides a number of custom utilities that are intended to provide productivity enhancements. Below is a list of custom utilities that are available within the WSDOT CAE environment. These tools are included in the **WSDOT Toolbox** from either the WSDOT pull down menu or the WSDOT Items toolbar (red toolbox icon) and grouped by basic function type such as Drawing Utilities, File Utilities, etc.

Also noted for informational purposes are utilities that have been retired due to new native tools with similar functionality. If you have any questions about these utilities, please view the help files from within the **WSDOT Toolbox** or contact WSDOT CAE Support.

### Current WSDOT Utilities

Name	63	EX	V8i	Found In	Description
Active Angle 2 Point	X	X	X	Drawing Utilities	Sets the active angle by 2 points
Active Angle 3 Point	X	X	X	Drawing Utilities	Sets the active angle by 3 points
Add Levels for GuidSign		X	X	File Utilities	Adds GuidSign's mandated levels to current DGN file
Adding GUID (CAiCE to InRoads)		X		InRoads Utilities	
Angles & Arrows	X			Drawing Utilities	Toolbox for placing arrows and setting the active angle
Arrows – Double		X	X	Drawing Utilities	Places two arrows, one on either end of a line
Arrows - Half		X	X	Drawing Utilities	Places a half arrow at the end of a line
Arrows – Single		X	X	Drawing Utilities	Places a full arrow at the end of the line
Auto Turn	X	X	X	Drawing Utilities	Launches Auto Turn
Base Map Documentation	X	X	X	Reports	Documents a CAD file exporting to an Excel file
Batch Print			X	Sheet Utilities	Print Sheets
Bearing & Distance By Points	X	X	X	Drawing Utilities	Measures the distance and bearing between two data points

Calculator	X	X	X	Miscellaneous	Opens the Windows Calculator
Cell Replacement		X	X	File Utilities	Replaces Points with cells and linestrings with cells for Photogrammetry
Change Case	X	X	X	Element Utilities	Changes the case of text to all upper, capitol, sentence or word
Change DGN Label		X	X	File Utilities	Changes the label of a CAD file to PSE Sheet, PSE Base, RW Sheet, or RW Base
Change Level		X	X	Element Utilities	Move elements from one level to another, check percentage of 63 levels and expanded level elements
Change WSDOT Scale		X	X	File Utilities	Changes the scale of a file
Convert 63 to Expanded		X	X	File Utilities	Convert a 63 level file into an expanded level file
Copy and Paste Relative	X	X	X	File Utilities	Copy and paste elements from one file to another in the same coordinates
Count Elements	X	X	X	File Utilities	Bentley's macro to count graphical elements
Datum Conversion Utility	X	X	X	File Utilities	Transforms coordinates to State Plane or Project Datum
Drainage Pipe	X	X	X	Drawing Utilities	Constructs a drain pipe with two lines or a closed shape
Drainage Profiler	X	X	X	Drawing Utilities	Constructs drainage structures and pipes
Global Cell Scale	X	X	X	Element Utilities	Change the scale factor of cells to the same scale factor and leave them at the original coordinates
Info Snap	X	X	X	File Utilities	Launches InfoSnap
InRoads 2004		X		InRoads Utilities	Launches InRoads 2004
InRoads V8i			X	InRoads Utilities	Launches InRoads V8i
InRoads XM		X		InRoads Utilities	Launches InRoads XM
Label Sheets	X			Sheet Utilities	Places the labels on sheets
Level Scroll	X			View Utilities	Scroll through the occupied levels one at a time
Load VBA Libraries	X	X	X	Miscellaneous	Load all the WSDOT VBA libraries

Match Line Base	X	X	Drawing Utilities	Constructs a line at a station with an offset for the length in a Base Plan
Match Line Sheet	X	X	Drawing Utilities	Label the match line in a sheet file
Measure Scale	X	X	X Drawing Utilities	Multiplies the measured distance by a scale factor
MicroStation Environment Report			X Reports	
Miscellaneous Tools	X	X	Drawing Utilities	Toolbox of old MicroStation tools
Mouse Fun	X	X	Miscellaneous	Utility to test the mouse buttons
North Arrow (Rotate to Active)	X	X	X Drawing Utilities	Places a north arrow cell facing north
North Arrow (Rotate to Reference)	X	X	X Drawing Utilities	Places a north arrow cell in the sheet file by selecting a reference
Page Layout		X	X Drawing Utilities	Places shapes along a centerline and creates saved views from the shapes
Place Leader		X	X Drawing Utilities	Places Leaders with Text or just text
Place Sheets	X		Sheet Utilities	Places sheets
Place\Label\Stamp Sheets		X	X Sheet Utilities	Places sheets, adds labels to the sheets, and places stamps on the sheets
Print 63 Level Sheets		X	X Sheet Utilities	Print Sheets
Print Sheets	X	X	X Sheet Utilities	Print sheets
Quad Maps	X	X	X Drawing Utilities	Attaches and merges quad files into the active file
See Thru Shapes	X	X	X View Utilities	Puts the filled shapes at the end of the file
Staking Report Generator		X	X InRoads Utilities	Launches the Excel spreadsheet and populates it with slopestake data
Station & Offset Import	X	X	X Drawing Utilities	Imports/exports items in an Excel spreadsheet as points or cells
Station & Offset Utilities	X	X	X Drawing Utilities	Measure offsets from stations on a centerline or place items at a station and offset from a centerline

Superelevation Calculator	X	X	X	InRoads Utilities	Launches the superelevation calculator
Text View Rotation	X	X	X	Drawing Utilities	Rotates selected text to the rotation of the view
Tile Two Views	X	X	X	View Utilities	Tiles View 1 and 5
Unload VBA Libraries	X	X	X	Miscellaneous	Unloads all the WSDOT VBA libraries
Update Levels		X	X	File Utilities	Checks to see if the file needs to be updated with different levels
Update Project to V8i			X	InRoads Utilities	
User Settings Import/Export	X	X		InRoads Utilities	This utility takes project default configurations, custom toolbars and macros, project files and survey text import wizard (*.tiw) files and copies from a project directory to a backup folder location and vice versa.
Zoom to Station	X	X	X	View Utilities	Zoom to a specified station on a centerline

***Retired WSDOT Utilities***

<b>Name</b>	<b>Found In</b>	<b>Description</b>
Addendum Block	Drawing Utilities	Use native commands: Set level to <b>SH_GI_AddendumShading</b> and use any drawing tool
Addendum Shape	Drawing Utilities	Use native commands: Set level to <b>SH_GI_AddendumShading</b> and use any drawing tool
Area Utility (Bentley)	Drawing Utilities	Use native commands: Measure Area. Command available as key-in or on Measure toolbox
Area Utility (WSDOT)	Drawing Utilities	Use native commands: Measure Area. Command available as key-in or on Measure toolbox
Clip Limits	File Utilities	Use native commands: Set level to <b>SH_GI_ClipLimits</b> , create a shape, clip
Export to 2D	File Utilities	Use native commands: File > Export... > 2D
Measure Level	Drawing Utilities	Use native commands: Select desired elements, use Measure Length (available as key-in or on Measure toolbox)
Navigator	View Utilities	Use native commands: Adjust view - Pan, Zoom In, Zoom Out, and Window Area.
Previous File	WSDOT Items	Use native commands: toolbox Tools > Toolboxes > View Groups
Prosoft	Miscellaneous	Software no longer licensed
Repair DGN	File Utilities	Use native commands: File > Compress Design and Utilities > Data Cleanup
Save As V7	File Utilities	Use native commands: File > Save As... with the file type set to MicroStation V7
Saved View Recall	View Utilities	Use native commands: Utilities > Saved Views
V8 Snappy	Drawing Utilities	Needed for CAiCE data prior to XM. If necessary, data can be made snappable with XM Element Info tool