

Appendix D - Workflows / Tips and Tricks

It is a well known fact that most users of software applications use only a small amount of the commands and tools available to them. CDOT has created a Tips and Tricks web page and Workflow documents for the purpose of sharing commands, tools procedures, and information in order to make designing easier and more efficient.

Workflows

Many of the following workflows can be accessed from the Start Menu under _CDOT_CADD_Information. Note: this is only applicable for CDOT employees unless consultants set up a similar start menu procedure.

Batch Process

This document guides you through using the Batch Process tool in MicroStation. Additional Batch Process files can be substituted into this workflow. This example uses a specific batch process file that changes the level of the North Arrow cell and the Match Lines. The level is incorrect when the sheets are created by the Plan and Profile Generator in InRoads. The North Arrow and Match Line levels can be changed in multiple sheets at the same time by executing a Batch Process command file.

Creating Multiple Plan Sheets

This document guides you through manually assembling multiple plan sheets using MicroStation. The major benefit of this workflow is the limits and orientations of plan sheets are determined early in the process. These sheet limits can be used to identify proper position, size, and rotation of text and tables.

Directory Structure

The CDOT workflow for projects require that graphic and design data be created in multiple design files during the course of the project development. These design files need standard, informative, and unique file names, structures and folder locations for ease of use by both other disciplines and for deliverables to the contractor.

Greek Characters

This document guides you through placing Greek characters within the MicroStation text editor. The characters can be placed within the typed text string with this procedure.

InRoads Plan and Profile Generator

This document guides you through using the Plan and Profile Generator command in InRoads.

Linking MicroStation Files to Office Documents

This document guides you through the linking of Microsoft Office documents within MicroStation.

Placing SignCAD Signs

This document guides you through placing Sign graphics created by SignCAD software into MicroStation drawings.

Printing Workflows

Printing

This document guides you through the basic functions of MicroStation printing. It is used for printing single sheets, on a sheet by sheet basis. See Batch Printing for printing multiple sheets at one time.

Batch Printing

Batch Printing is used to print multiple files at one time. This tool can assist you in organizing Plot Sets for milestone submittals. A .job file can be saved and called back for future printing. It can also be used for plotting to PDF.

CDOT Printer Driver Adjustments

The default Print Driver for MicroStation has been set up for 11x17 printing and should not have to be edited. However, printers can vary in the naming convention for 11x17 inch sized paper. If the default paper size does not set automatically, you should try making the adjustments defined in the workflow.

Sheet File Creation

This document guides you through creating a new sheet file in MicroStation. We will be going over placing the sheet border around coordinate based model graphics. Setting up sheets this way maintains the coordinate based information and measurements are in real world dimensions.

Sheet File Creation with Multiple Scales

This document guides you through creating a sheet file with multiple scales. Going over placing the sheet border around coordinate based model graphics. Going over attaching and scaling additional model files and placing text and dimensions in the sheet files.

Title Sheet Vicinity Map

This document defines the procedure for inserting a Vicinity Map into the Project Title Sheet.

Traffic Signing Menu

This document guides you through the traffic signing workflow on the new CDOT Menu's.

Typical Section Program

This document explains the basic functions of the CDOT Typical Section Program. This program writes graphical data to the typical section file at a scale of 1:10. All of the graphical properties such as the levels, patterns, text, and cells are set by default to CDOT standards.

Updating InRoads Features

This document guides you through updating Digital Terrain Model (DTM) feature styles and Transition Control names within InRoads

CDOT Tips and Trick

CDOT Tips and Tricks found on the CADD and Engineering Innovation website, which can be accessed from inside MicroStation on the CDOT Group menu under CDOT Help. This website is presently only available to CDOT personnel.

MicroStation Tips and Tricks

- Changing Elements ByLevel
- CADD Library Details
- Accudraw Angles

CDOT CADD Manual - Chapters 1

- Accudraw Coordinate Readout
- Accudraw Feet and Inches
- Adding and Subtracting from Selection Set
- Additional MicroStation Training Books
- Available Training Manuals
- Bar Scales
- Change Direction of Line
- Change Scale of Cell
- Change Scale of Linestyle
- Change Scale of Text
- Changing Coordinate System
- Configuration Version Number
- Converting Complex Chain
- Create Region
- Decimal feet to Inches
- Dismissing Accudraw
- Dividing in Input Fields
- Dropping and Dragging Reference files
- Dropping Dimension Elements
- Editing Cell Text
- Extracting Column Information
- Fence Selection
- File Fence Command
- Level Display and Level Manager
- Level Manager Plot No Plot
- Linestyle display Tip and Trick
- Measuring with AccuDraw
- Modify Auto Dimension
- Modifying Element Attributes
- More Accudraw Angles
- Panning Cursor
- Printing a dialog box
- Problem Placing Fractions
- Resizing Accudraw Compass
- Resizing Keyin Dialog
- Scaling About Element Center
- Shared Cells and Text Editing
- Stacked Fractions within Text Editor
- Text along element
- Thumbnail Display
- Toggle Dimension Extension Lines
- Updating annotation scale
- V202 Survey Tabulation Sheet
- Viewing Attributes
- What's a Transient Element
- Why use MicroStation Dimensioning

- Workaround Single to Multi Text

InRoads Tips and Tricks

- Survey Duplicate Shot Numbers
- LandXML Suggestion
- Added Features to Cross Sections
- Adding and Subtracting in InRoads
- Adding points to the end of a feature
- Calculating End Area Volumes
- Cross Section Feature Editing
- Cross Section Surface Symbology
- Cross Section to Surface
- Cross Section use Features Only
- Decision Table Decisions
- Default Active Surface
- Defining Slopes along template segment
- Design Surface Options
- Dithered Features
- Drape Surface Command
- Editing Feature Points
- Empty Design Surface
- Feature and Graphic Lock Toggle
- Feature Tag Information
- General Transition Control Names
- Global Scale Factors
- Help on a Command
- Label Contours Enhancement
- Locate Buttons
- Locating Features in Design File
- Locks Dialog Box
- Menu Location
- Merging Surface Models
- More Options on Surface Command
- Multiple InRoads Products
- North Arrow P&P Generation
- P&P Generator
- Point densification
- Point Snap
- Points to End of Feature
- Populating InRoads Explorer
- Profile Shift in P&P Generator
- Resetting Toolbars
- Right of Way Definition
- Set Slope Along
- Setting Alignment Points based on other Alignment

CDOT CADD Manual - Chapters 1

- ShortCut List
- Slope Surface and Longitudinal Features
- Special Character keyin
- Template naming convention
- Update Cross Section Command
- What size pipe am I
- Wildcards
- Workflow toolbars
- Write template points to model