



# OpenRoads Designer CONNECT Edition

## – *Survey Training for Users*

### Assumptions:

- Have basic MicroStation skills
- Have basic Civil Engineering and Survey knowledge
- For all users ... existing GEOPAK, InRoads or MX users, or New users

### ***QuickStart for Terrain Display***

- Introduction to Terrain Display
- Displaying Terrain Features and Changing Contour Intervals
- Using Feature Definitions to Display Terrains
- Referencing and 3D Terrain Model to a 2D Project File
- Using Override Symbology and Element Templates
- Label Contours and View Background Map
- Label and Analyze Terrain Points

### ***Importing and Reviewing Survey Data***

- Assign Geographic Coordinate System
- Create a New Survey Design File
- Create a Field Book
- Import RAW and ASCII Survey Data Files
- Review the Survey Data via Explorer, Decorations and Survey Details
- How to Review Survey Data in 3D and Adjust the Terrain Model Display

### ***Editing Link Code Survey Features***

- Annotate Survey Features

### ***Using and Editing Terrain Models***

- Thematic height terrain display
- Creating a terrain from graphical elements using filters
- Modify terrain features and apply terrain rules
- Report on and resolve crossing break lines and conflicting points
- Create a complex terrain model
- Control edge triangles by edge method, triangle edits and boundary features

### ***Creating and Editing Centerline Geometry***

- Using Civil AccuDraw
- Creating horizontal geometry lines
- Creating horizontal geometry arcs
- Creating complex (alignment/chain) horizontal geometry
- Defining Stationing

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- Editing geometry elements
- Editing with the Table Editor
- Appending geometry elements
- Using Complex Redefine
- Verifying geometry layout with Design Standards
- Civil Message Center
- Annotating Geometry
- Display profile model
- Create vertical geometry lines
- Create vertical geometry parabolic curves
- Create complex vertical geometry
- Display intersection of another alignment on the profile
- Edit Vertical Geometry with the Table Editor
- Edit Vertical Geometry with Right Click
- Append Vertical Geometry Elements

### ***Beyond Centerline Geometry***

- Prove that OpenRoads Remembers how you built your design when that design is updated
- Evaluate a Feature and Explore Relationships via the Heads-Up Display

### ***Right of Way Fundamentals***

- Create the Existing Right of Way Centerline using the Geometry Builder tool
- Move and Rotate Geometry using the Transform Elements tool
- Create Existing Right of Way Lines using the Single Offset Partial tool
- Create an Existing Parcel from record property data using the Geometry Builder tool
- Create and Review Closure Reports using the Map Check tool
- Edit a Parcel with the Geometry Builder Edit tool
- Create a Parcel from CAD Graphics using the Geometry Builder Edit tool
- Create Proposed Right of Way Lines using Civil Geometry and Civil AccuDraw
- Create a Proposed Right of Way Parcel
- Create a Legal Description
- Create Right of Way Plan Sheets
- Create Station Offset Annotation Labels
- Place Intelligent Plan Labels
- Adjust and Edit Labels
- *Set Points*

### ***Survey Ask-the-Instructor – VDOTs dataset and workflows***

- Examine and review of the VDOT environment
- Raw data import and review
- Q&A session
- Further training (as needed)