

RoadEng Civil Training - Outline

Introduction

This document is an outline for a 3 day RoadEng training session for Civil Engineers. Most sections will be part of the same project (with variations).

Outline

Day 1

- Concepts
 - Modules
 - Training procedure (demo then student exercise)
- Survey import
 - ASCII file, Open
 - View with test
 - Setup columns
 - Setup point codes
 - Discuss save as normal.iop
 - TIN model, Create
 - Max triangle length
 - Contours
 - View in 3D
 - TIN model, Fix
 - Find and fix bad points
 - Create break-lines
 - Fix crossing break-lines
 - Insert more data
 - Visualization
 - Add air photo
 - 3D with Plan drape
 - Google Earth
 - Drawing customization
 - Line types, Symbols, Hatching
 - Backgrounds
 - Insert DWG etc.

- Location Design
 - Intro
 - Large scale re-alignment
 - New alignment
 - Horizontal alignment
 - Vertical alignment
 - Mass haul
 - Optimize volume

Day 2

- Materials, stripping
- Screen layouts
- Closer look at curves
- Culverts
- Template control
- Templates, assign parameters
- Templates, editing
- Widening
 - Use existing alignment
 - Template control
 - Report points

Day 3

- Output
 - Data window
 - Sections
 - Multi-plot
 - DWG
- Site design, volumes (If time permits)
 - Volumes optimization
 - Merge terrains
- Client Projects