

# Project Guidelines (Civil 3D)



## Project Suitability






Indicators of a suitable project for Softree Optimal are:

- Earthwork movement and some flexibility to move vertically/horizontally.
- Examples: rural road, highway, rail, or pipeline.

## General Requirements

- Less than 10 kilometers/6 miles in length. Longer lengths can be optimized in segments.
- Single alignment. Currently Softree Optimal cannot optimize multiple alignments at once. Intersections, interchanges or ramps are not optimized but can be accounted for in the earthwork calculations.

## Data Requirements (from Civil 3D)

- 1) A single drawing (.dwg) file with the following:
  - 1.1) The *Main Corridor* 
  - 1.2) The *Centerline Alignment*  (the one being optimized)
  - 1.3) A *Sample Lines Group*  based on the *Centerline Alignment* (from 1.2 above) of the *Main Corridor* (from 1.1 above) and a sub-grade *Corridor Surface*  derived from the *Main Corridor*
  - 1.4) *Section View Group*  of the *Sample Lines Group* (from 1.3)

NOTE: It should be possible to re-build the *Main Corridor* without installing additional PKT files

- 2) The original ground surface (.dwg or LandXML)
- 3) All additional .dwg files that are referenced from the main drawing

## Design Controls, Costs & Parameters

*(These are not required, but are recommended for a complete demo.)*

- Cut & fill cost of materials (per cubic yard or cubic meter), and any pit locations.
- Maximum/minimum values for: grades, curve lengths, k-value.
- List of constrained points. Provide station numbers, elevations and (optional) grades.
- Any additional constraints, such as minimum height of fill.

**Your data. 30-minute custom demo. See the savings for yourself.**

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