

# FOREST ENGINEERING Software

Roads, Bridge Sites, Log Dumps, Cable Harvesting, Culverts

Good engineering and planning can reduce the costs associated with road building & logging.

#### That's where we can help.

By making foresters and engineers more productive both in the field and in the office, we are helping forest operations increase harvest efficiency.

# **Powerful software tools for Forestry Engineering**

# Road Eng®

Complete road and site design software. Includes all the features: Survey Data Management, Mapping, Site Planning, Cable Logging Analysis, Road Design.

# TerrainTools®

3D mapping and site design software. Create 3D terrain models and engineering designs for a wide variety of projects. Includes options for manual p-line data entry and cable logging.



Alignment optimization software add-on for RoadEng. Find optimized road locations with Path Explorer Al based on design criteria, cost and available right-of-way. Minimize earthworks further with profile (cut/fill) earthworks optimization.

#### **An Industry Leader**

Softree is recognized as a world leader in forest engineering software solutions. Proven and field-tested, our software is used by thousands of consultants, companies, universities and governments worldwide.

We recognize that most forestry professionals spend a lot of their time in the field--not in front of a computer screen. That's why we have put a great deal of effort into keeping our software simple and intuitive.



Leverage LiDAR



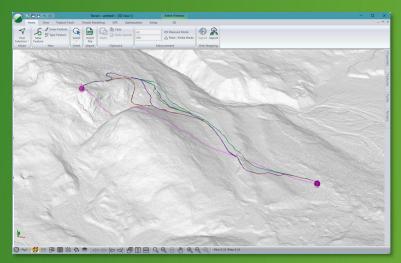
Produce High Quality Designs, **Fast** 



**Optimize** 

#### **FOCUS ON ROAD DESIGN**

Geometric road design with an intuitive interface. Create surfaces from LiDAR, UAV, and conventional survey data. Easily monitor slopes, right-of-way, grades, volumes, and mass haul in real-time as you design.

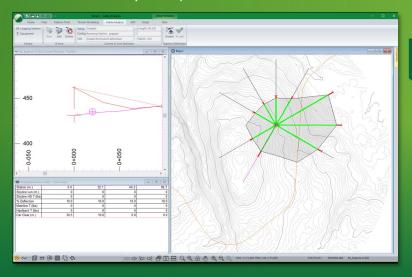


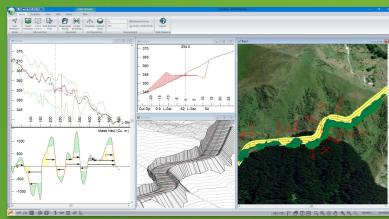
#### **CREATE 3D TERRAIN MODELS**

The Terrain module includes a complete set of functions for creating 3D surfaces and digital terrain models (DTM), including control of strategic data thinning, break lines, contours and boundary areas.

Terrain's powerful hydrology tool kit allows you to effortlessly consider important hydrology elements using features that:

- identify streams and ponds,
- delineate catchment areas and drainage areas to features
- calculate flow paths to/from features.

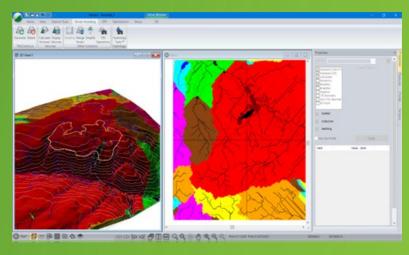




#### **OPTIMIZE PRELIM ALIGNMENTS \*\***

Al-powered Path Explorer quickly generates optimized alignments within the Terrain module, reducing earthwork and surfacing costs while meeting constraints like curvature, grade, side slope, and cut/fill limits. Use construction zones to avoid no-go and high-cost areas.





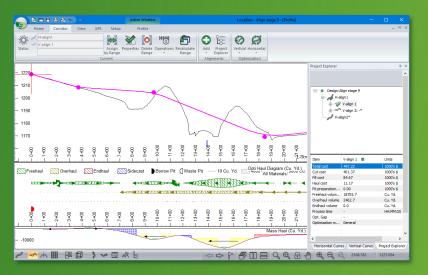
## **CABLE LOGGING ANALYSIS**

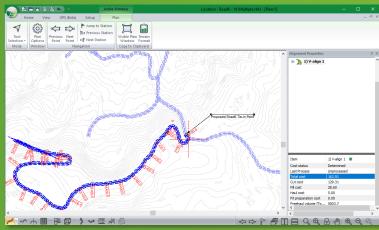
Analyze payload, clearance, and line tensions. Evaluate different types of equipment and logging configurations. Plot various carriage positions for a given midspan deflection (third point method).

- \* RoadEng®license required.
- \*\* Softree Optimal license required.

#### **LIDAR-BASED ROUTE PLANNING\***

Both RoadEng and Terrain Tools handle more than 10 million LiDAR points with ease and include functions for LiDAR thinning outside your areas of interest. Design and cost multiple roads in the context of each other. Plan road networks. Evaluate road options before going into the field. Take your LiDAR map & preliminary design with you to the field, if you want to.





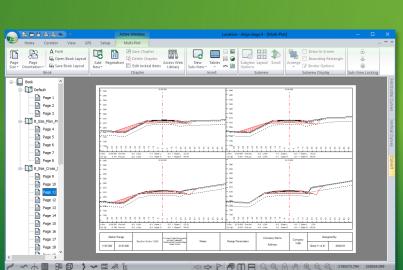
#### **OPTIMIZE YOUR EARTHWORKS \*\***

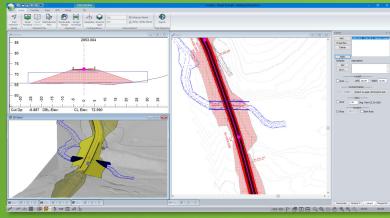
Save time and reduce costs by leveraging profile optimization (via the Softree Optimal add-on), which accounts for assigned design standards and determines the lowest-cost alignment based on earthwork and material movement.

Track material quantities, movement, and costs in realtime with graphical and tabular reports.

#### **DESIGN CULVERTS \***

The interactive culvert editor panel allows you to modify culvert position, diameter, type, length, skew and gradient. Easily add, edit and remove culverts. Design options available for both natural stream crossings and cross drains.





## **CUSTOMIZE OUTPUT\***

Easily share and showcase your design with Multi-Plot Report Builder. Access an e-library of design templates. Print out plan, profile, and cross-section data as one document. Simplify your presentation of deliverables with single document control.

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- \*\* Softree Optimal license required.

# **DESIGNED FOR FORESTRY**



## **LiDAR**

**Engineer with LiDAR!** Powerful for handling large LiDAR data sets. Tools for accurate surface thinning and creating terrain models.



# **PLANNING**

A flexible engineering solution that allows you to map, cost and plan forest engineering



engineering, not drafting. It's not designed for CAD specialists. Our suite of products has been designed for busy forest engineers.

#### **Systems Requirements**

- Windows 7, 8, 10, or 11 Operating System
- 4 GB system RAM (8 GB recommended)
- Minimum 800 x 600 resolution (more recommended)
- Processor or motherboard built-in video is adequate
- 1 GB disk space

#### **File Format Compatibility**

- IMPORT: .TIF, .JPG, .BMP, .SHP, Mr.SID, ECW, LAS, .LAZ, .GPX, .GML, .ASCII, Excel, .DXF, .DWG, USGS DEM, SDTS, .TXT, .CSV, LandXML, .DGN, .KMZ. .KML. .POL. .JP2
- EXPORT: .SHP, .ASCII, Excel, .DXF, .DWG, .JPG, .DGN, .KMZ, TIF, JPG, BMP and LandXML.

# **Used by Leading Forestry Companies Worldwide**











1,700+ Companies | 5,000+ Users | 70+ Countries

Call us Toll Free at **1.866.519.6222** or **1.604.519.6222** (International) Email us at sales@softree.com | Visit us at www.softree.com

