

# CARLSON CIVIL

- CIVIL DESIGN THAT PUTS YOU IN THE PASSING LANE

## Get Powerful Automation

What might take days with other civil software takes just hours, or even minutes, with the powerful, intuitive Carlson Civil

**Road NETWORK.** Build all roads, intersections and cul-de-sacs in 2D and 3D with a single click of the "PROCESS" button.

**Site NETWORK.** Elevate your estimating accuracy with this intuitive layer-based surface generator and earthwork calculator.

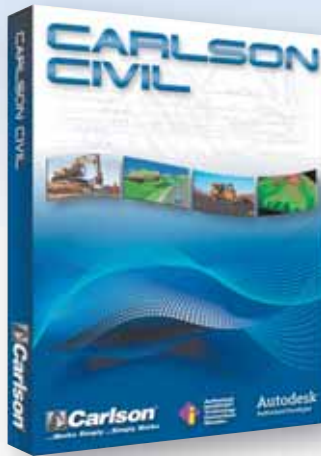
**Lot NETWORK.** Quickly define an entire subdivision of lots based on an outer boundary, interior ROWs or Centerlines, and a simple set of user-defined "rules," then pick "PROCESS" and the lots appear, defined and labeled.

## Carlson Offers Choice

- AutoCAD® or IntelliCAD® – Carlson Civil runs on top of any AutoCAD® or Map® from versions 2000 up AND Carlson Civil comes with built-in IntelliCAD®
- Automatic, Prompt or Manual – Carlson's fully dynamic design environment – its trademark "networking" – means that changes made to one aspect of your design are reflected in all other related aspects
- 2D, 3D, or Flyover – get true 2D, easy-to-use 3D, plus the ability to view an aerial image draped onto a surface in both the Carlson 3D Viewer and Surface 3D Flyover
- Affordable, Voluntary Maintenance Programs – Carlson customers are allowed to choose to upgrade based solely on the merits of the software's new features. There is no retirement of software.

## Find Out More NOW!

For more info or to locate a dealer near you  
**606-564-5028 • 800-989-5028**  
[www.carlsonsw.com/civil](http://www.carlsonsw.com/civil)



## Be Competitive with Carlson

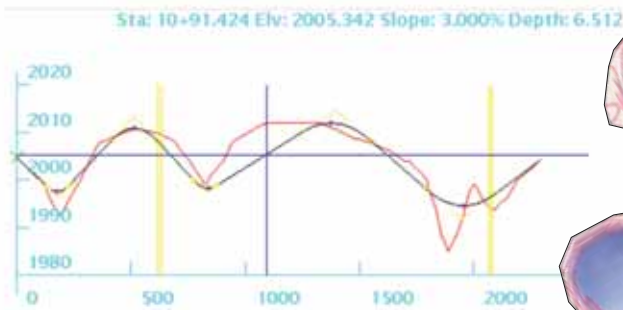
"[Carlson Civil] enables us to provide the same service as the big firms without the level of cost."

*Eric Almond, Almond Engineering, PA, Jacksonville, Florida*

"Since we started using Carlson Software, we've been able to be much more responsive to our customers. We can get answers to them in a much shorter amount of time. And the Carlson support staff is outstanding. It amazes me that I can call in, get a person right away, get my question answered and be right back to production"

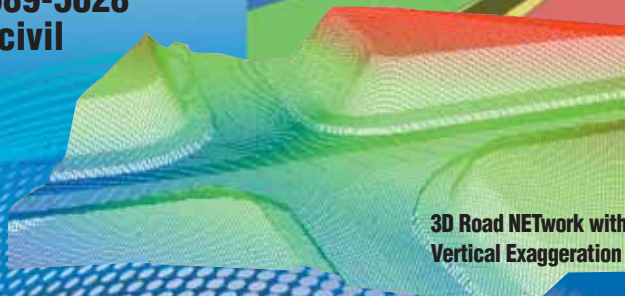


Road Design Interface with Dynamic Graphics



Classic Cut/Fill Color Map

3D Drive Simulation



3D Road NETWORK with Vertical Exaggeration



# CARLSON CIVIL

- ADVANCED TECHNOLOGY THAT WORKS FOR YOU

## Top New Features

- **Road Rehabilitation** command to create profiles for specified overlay with milling or leveling.
- Command for **Vehicle Path Tracking**, which allows you to trace wheel paths for vehicle dimensions along centerline.
- New ability to **Edit Contours** and instantly update the underlying 3D model (updates the underlying TIN surface to match the modified contours), a feature that is unique to Carlson.
- **Draw Profile** has graphic previews of settings within dialog and retains custom edits of labels.
- Added setting for curve definitions, including either roadway or **Railroad Curves**.
- New **Draw Plan View Sheets** command to create layouts of plan view sheets along a centerline.

## General

- **CAD Platforms:** AutoCAD versions 2011 to 2000 as well as AutoCAD Map, Land Desktop and Civil3D, and IntelliCAD 6.6
- **Project Setup:** Flexible data and settings storage
- **Drafting Enhancements:** Handy tools for working in AutoCAD/IntelliCAD
- **Data Compatibility:** Supports industry standard LandXML plus specific data conversions
- **Languages:** Spanish, Portuguese, Russian, French, German, in addition to English

## CAD Standards

- **Draw Standard Item:** Create common CAD entities with pre-defined properties
- **Settings Explorer:** Manage all program settings from single interface
- **Settings Libraries:** Setup tables for symbols, layers, road templates, etc.
- **Data Depot:** Document management for workgroups and archiving
- **Project Sub-Folders:** Custom controls of data folders by type

## 3D Data

- **Elevate 2D to 3D:** For spot elevation, polylines, contours and pads
- **Edit-Assign Polyline Elevations:** Elevates 3D polylines using control points
- **3D Polyline Tools:** Draw, offset, fillet and merge 3D polylines

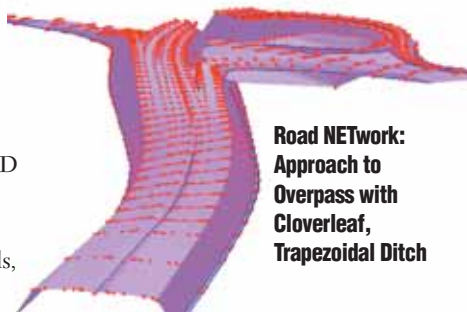
## Surfaces

- **Build Surfaces:** By triangulation or rectangular grids
- **Contouring:** One step from 3D entities or from surface files
- **Triangulation Utilities:** TIN math and offset, simplify and merge functions
- **Surface Manager:** Change surface properties and data
- **3D Surface Flyover:** 3D viewer with vehicle to drive over surface or follow 3D path
- **Slope Analysis:** Slope reports and zone analysis

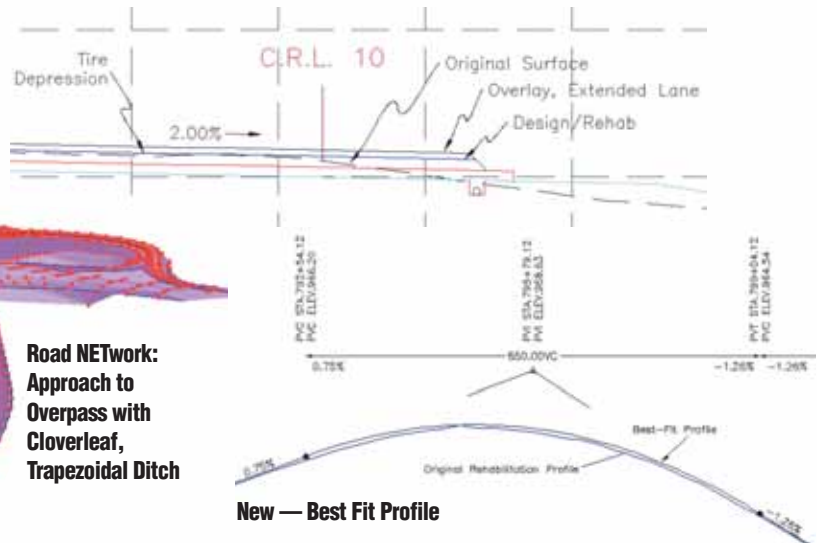
## Grading

- **Volumes:** Earthwork volumes between triangulation or grid surfaces
- **Pad Design:** Tie cut/fill slopes from pad perimeters
- **Cut/Fill Color Maps and Labels:** Draw shaded red/blue map with labels
- **SiteNET:** Organize surfaces by layer with subgrade adjustments

## Template Detail for Road Rehabilitation



## Road Network: Approach to Overpass with Cloverleaf, Trapezoidal Ditch



## Centerlines

- **Design Centerlines:** Input alignments on screen or in dialog with graphics
- **Label Stations and Offsets:** Annotate along centerline at selected points
- **Calculate Offsets:** Reports stations and offsets for selected points along centerline
- **Offset Points:** Create points at specified stations and offsets
- **Spirals:** Flexible handling of most complex spiral curves

## Profiles

- **Create Profiles:** From surfaces, screen entities, points on centerline, etc.
- **Quick Profile:** One step profile creation with real-time updates
- **Input-Edit Profiles:** Enter profile data in dual spreadsheet and graphics
- **Draw Profiles:** Draws profiles on grids or plan-profile sheets
- **Profiles To 3D:** Create points and 3D polylines from profiles

## Sections

- **Create Sections:** From surfaces, screen entities, points, etc.
- **Quick Sections:** One step creation of sections
- **Draw Sections:** In vertical stack or sheets
- **Input-Edit Sections:** Enter section data in dual spreadsheet and graphics
- **Sections to 3D:** Create points and 3D polylines from sections
- **Mass Haul:** Diagrams and Analysis
- **Section Volumes:** By end areas method

## Road Design

- **Template Design:** Detailed yet simple template design
- **Template Transitions:** Define transitions for templates and superelevation
- **Road Network:** Dynamic road design with intersections and cul-de-sacs

## Points

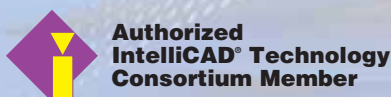
- **Draw Points:** Draw points with settings for symbols, layers and styles
- **Point Groups:** Point group manager to define sets of point by filters
- **Coordinate File History:** Tracks all changes to points with report and undo functions
- **Fix Point Label Overlaps:** Finds point label overlaps with rules to fix automatically
- **Point Tools:** Utilities for modify point labels such as move with leader, twist and resize

## Area/Layout

- **Label Areas:** Customized area label styles
- **Size Areas:** Sliding side, hinged and radial from curve
- **Lot Manager:** Definitions by point numbers
- **Lot Network:** Size lots along alignment
- **Parking, Intersections and Cul-de-Sacs:** Layout for linework

## Annotation

- **Angle & Distance Labels:** Flexible routines to label linework
- **Curve Labels:** Label curve data in stack, along arc or in table
- **Mapping Labels:** Routines to create typical plat labels
- **Linetypes:** Draw special linetypes



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Authorized Developer

