CivilCAD 10

Roads | Pipes | Earthworks | Survey

Sivan design was incorporated in 1996 becoming a world leading provider of customized enterprise level geospatial solutions, including: National Land Projects, comprehensive GIS solution integrating with ERP capabilities, 3D GIS application and user friendly civil engineer CAD product.

CivilCAD 10 - Survey
● Surveying solutions and COGO calculations

CivilCAD 10 - Standard
● Topography, land development and volumes calculations

CivilCAD 10 - Roads
● Roads construction and design

CivilCAD 10-Pipes
● Water engineering solutions

CivilCAD 10-Full Package
● The complete package

CivilCAD 10

For further information, online tutorials and a free trial version visit our website
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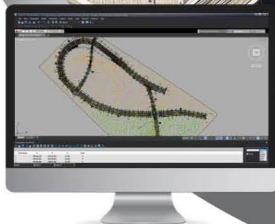
CivilCAD 10 Solution Suite provides civil professionals with a complete software solution. From surveyors and contractors to designers and engineers, whether on site or in the office, CivilCAD 10 Solution Suite offers wide- ranging solutions to meet all their needs including roads construction and design, pipes layout planning, earthworks calculations, comprehensive surveying capabilities and life-like 3D visualization.

CivilCAD 10 Solution Suite Highlights -

- Complete integration – design elements, views, calculations, work processes and drawings are all dynamically linked and instantly updated upon every change resulting in maximum productivity and speedy project output
- Innovative work environment – supports Autodesk (tm) "AutoCAD" (R), ZWsoft (tm) "ZWCAD" (R), Bricsys (tm) "BricsCAD" (R) drawing environment
- Intuitive user-interface – intelligent task based toolbars and contextual menus simplify work environment and result in greater usability
- Flexible import and export capabilities – bi-directional import and export capabilities from any standard conforming equipment

CivilCAD 10 Solution Suite enfolds Autodesk™ AutoCAD®, ZWsoft (tm) "ZWCAD" (R) Bricsys (tm) "BricsCAD" (R) working environment with supplementary set of advanced design tools for civil professionals allowing time-consuming tasks to be done thus effortlessly and an accurately. CivilCAD 10 Solution Suite consists of five profession based modules to match user's requirements avoiding overwhelming and complex work environment and resulting in intuitive and exceptionally easy to operate user interface.

CivilCAD 10-Roads
CivilCAD 10-Roads includes complete set of tools for road construction, road design, earthworks calculations, surveying, and above and underground infrastructure design. The software combines powerful design options, accurate and high-speed results, and enhanced usability setting new standards for roads engineers worldwide.

Horizontal and Vertical Alignment Design
- Changes made to certain segments of the road's alignment geometry are reflected in the vertical alignment
- Automatic highlight of the cut-fill transition point in horizontal alignment
- Automatic road segments selection
- Visual indication of cut-fill minimum and maximum extents
- Complete horizontal alignment design set of tools including curves transition by clothoids or cubic-parabola.

Powerful Cross Section Design
- Sub layers associated with existing, structure and design layers are differentiated and displayed according to the defined material and thickness
- Ability to attach a ditch to an offset reference-line in the cross section
- Detailed underground and upper ground utilities display in cross sections
- Information layers can be separated to support authorities CAD standards
- Side ditches and gutters definition according to cut, fill or in-between situations
- Automatic height based side slopes cut or fill definition
- Automatic emphasize of parallel and intersecting roads levels
- Automatic side berms design
- Ability to define super elevation per cross section segment
- Ability to accurately place blocks in cross sections

Advanced Design Features
- Innovative junctions design including typical sections, islands, roundabouts and detailed reports.
- Define bridges and tunnels in the design including earthworks volumes calculations and reports.
- Unique and advanced visibility evaluation mechanism with export and reporting capabilities
- Automatic alert and delete mechanism of an overlapping area between two topography surfaces
- Ability to automatically create frequent backups of the project revisions with quick restore capabilities
- Load and save centerline's data in Land XML format
- Advanced retaining walls design module
- Complex urban roads design using extract module
- Comprehensive underground infrastructure information
- Intelligent earthworks calculations per layer
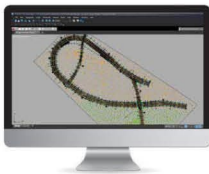
CivilCAD 10-Pipes
CivilCAD 10-Pipes includes complete set of tools for infrastructure pipelines planning including water, sewage, drainage, oil, gas, and telecommunication cables. Supporting both design and surveying aspects of upper and underground infrastructures, CivilCAD 10-Pipes offers limitless design capabilities.

CivilCAD 10-Pipes intuitive task-based interface supplies the engineer with contextual set of tools to easily handle each design phase unique needs.

Pipeline Layout Design
- Pipeline search by name with duplicate naming alert mechanism
- Display the pipeline's name near the manhole
- ability to display a crossing point between piplines alignment and layout tools
- Pipelines alignment and layout tools
- Actual size manholes, pillars and pipes display in both layout and section design
- Layout extraction from drawings

Reservoirs and Dams Design
- Unique method for reservoirs, dams and ponds design (combined with the Roads package)
- Balanced earthworks calculations
- Production of operational plans (scraper plane and sections)
- Levels based capacity computations
- Multi ponds design supporting shared embankments and slopes
- Special features allowing reservoir bottom-surface elevations design
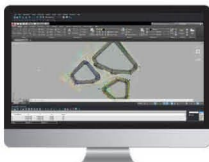
Detailed Section Design
- Ability to design sections in Drawing Environment Interface (AutoCAD)
- Receptors Invert Levels are displayed in the section's drawing table
- Broad toolset for defining pipeline depth, slopes, drops, manholes depth, manholes diameter, etc.
- Automatic air valves design capabilities to shorten design process
- Interactive updates between section and layout design
- Simultaneous presentation of existing and designed ground levels
- Detailed crossing infrastructures including depth and diameter
- Water pressure valves positioning along a pipeline feature

Comprehensive reports and plotting
- Volume calculations report generation
- Detailed reports: IPs, manholes, pipes quantities, size and depth, air valves and design details
- Discharges report
- Automatic division of sections according to the paper size for plotting

CivilCAD 10-Survey
CivilCAD 10-Survey package provide surveyors with a professional tool to fully meet their field-to-office requirements and needs.

- Direct interface with standardized surveying equipment (RAW & coordinates)
- Unique solutions for least squares traverse adjustments including polygon network and free network
- Superior coordinates editor for easy manipulation and filtering
- Easy to use setting-out tool from office-to-field
- Complete menu for geometric computations (COGO)
- User-defined sets of codes and their presentation as blocks in the drawing

CivilCAD 10-Standard
CivilCAD 10-Standard package appends to the Survey package a full set of features for handling contour lines and land development calculations. The package simplifies broad work processes from field data input, via area maps production, to a successful carrying out of the final set-out stage.

- Automatic creation and processing of contour lines
- Advanced and automatic solutions for handling open and closed breaklines
- Visual aids differentiate breaklines on the drawing
- Simultaneous work with existing and designed 3D-models
- Fast and easy creation of ground sections between any two points
- Cross layers quantities calculation and visualization using earthworks grid, triangles grid, or parcels
- Volume calculations report generation
- Wide range solutions for handling lots and their side-slopes
- Zero line drawing and earthworks contour lines