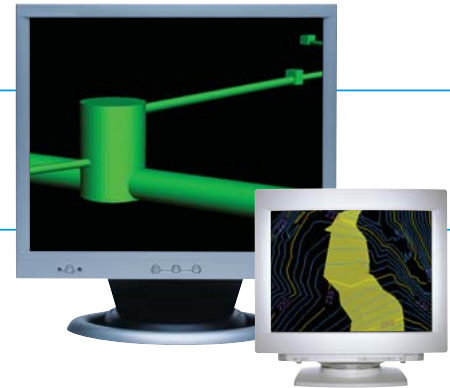


autodesk®



Roadway Drainage Design Simplified

CAiCE™ Visual Drainage® software is a comprehensive set of tools for roadway drainage design. It automatically calculates hydrologic and hydraulic parameters, combines standardized engineering principles and processes with an automated computation engine to save you time, and integrates project data with your roadway design procedures. In short, CAiCE Visual Drainage software expands the power of your designs, works with your team's processes, and enhances collaboration in your roadway or civil/site department.



CAiCE Visual Drainage software helps you use project data to design your roadway drainage infrastructure efficiently and accurately.

Database Integration

Take full advantage of your roadway design database with CAiCE Visual Drainage software. It accesses data from the design process—including vertical profiles, superelevation, and digital terrain models (DTM)—and uses it throughout the drainage workflow. Whether you designed your roadway with CAiCE Visual Roads® software or imported the design through our LandXML functionality, CAiCE Visual Drainage software helps you use project data to design your roadway drainage infrastructure efficiently and accurately.

Visualize While You Design

With CAiCE Visual Drainage software you can see the proposed design in section, plan, and perspective views simultaneously, so it's easy to spot and resolve conflicts. The drive-through utility gives you a realistic view of the design model and existing topography. This dynamic visualization during the design process saves you time and streamlines your project.

Productivity Tools

The CAiCE Visual Drainage interactive design approach is easy to learn and use. You can use it to develop a stormwater design, organize reports, and produce the required plan and profile sheets. Its error-checking and design constraint applications give you instant feedback on the accuracy of entered and calculated design parameters. Integration with both DGN and DWG formats facilitates plans production. And powerful customization tools help adapt it to your workflow.

CAiCE Visual Drainage 10

Digital Terrain Modeling (DTM)

- Color by slope, elevation, or surface type
- Model flow path automatically
- Construct and draw contours of the modeled surface
- Construct terrain cross sections perpendicular to an alignment

Project Parameters

- Establish or edit your own default parameters
- Load parameters from preestablished settings file
- Import geometry elements from DWG, DGN, or CAiCE design file

Interactive Network Layout Tools

- Locate inlets automatically at crest and sag along gutter profiles
- Use free-form digitizing
- Automatically place inlets at specified intervals
- Locate flanking inlets using HEC-22 flanking structure analysis

Automated Hydrology

- Use Interactive basin delineation, Tc Calculator, IDF Table Editor, and more
- Work with rational methodology
- Save time with the automated flow path tool

Culvert Analysis

- Analyze varied headwater and tailwater conditions and inlet grates
- Calculate performance curves and optimization curves

Automated Inlet Spread Analysis

- Use HEC-22 methodology to handle intercepted and bypass flow
- Configure multiple inlets
- Read hydrology and automatically populate parameters on an interactive spreadsheet

Automated Storm Drain Computations

- Use HEC-22 methodology, including HGL/EGL analysis and pipe/structure loss calculator
- Analyze pipe sizing and design
- Use multiple pipe shapes and configurations
- Reduce data entry time using a single dialog box and right-click options

Open Channel Analysis

- Perform cross drain, ditch bottom, and inlet analysis
- Perform HEC-22 capacity analysis
- Calculate velocity and freeboard

Drafting/Plans Production

- Create automated plan and profile sheets for drainage structures
- Profile plots showing hydraulic and energy grade lines
- Make automatic annotations
- Calculate pay item quantities
- Export cost reports to Microsoft® Excel

Pond

- Generate multiple hydrographs
- Calculate pond volume
- Specify pond geometry
- Control structure specification
- Create boundary condition specifications

Report Generation

- Tabulate storm sewer hydraulics
- Create roadway spread analysis reports and quantity takeoff reports
- Build customizable data tables and reports
- Calculate pay item quantities
- Make outflow and inflow hydrographs
- Create error checking and HGL/EGL analysis reports

Visualization, Graphics, and Imaging

- View contours, wireframe grids, slopes, and drainage information in 3D
- View background files

- Drape images onto surfaces
- Map images to real-world coordinates
- Display realistic, real-time renditions of your project
- Create and play AVI files for drive-throughs, design reviews, and client presentations

System Requirements

For system requirements, visit www.caice.com.

Companion Products and Services

Autodesk provides integrated consulting, training, and support to help you get the best return on your investment in Autodesk® technology. The CAiCE Maintenance Program gives you complete technical support and access to the latest CAiCE software releases and enhancements, simplifying your software management and budgeting process. To learn more, contact your Autodesk Authorized Reseller.

Purchase or Learn More

Purchase CAiCE Visual Drainage through your Autodesk Authorized Reseller. To locate the reseller nearest you, visit www.autodesk.com/reseller.

autodesk®

Autodesk, Inc.
410 Ware Blvd., Suite 1200
Tampa, FL 33619
USA

Autodesk, CAiCE, Visual Drainage, and Visual Roads are either registered trademarks or trademarks of Autodesk, Inc., in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders.

© 2003 Autodesk, Inc. All rights reserved.

000000000000113572