SEDCAD 4 for Windows was developed specifically for the design and evaluation of alternative erosion prevention and sediment control systems with a focus on earth-disturbing activities. It is a comprehensive program that includes hydrology, hydraulics, and design and evaluation of the effectiveness of both individual and an integrated system of erosion prevention and sediment control measures with respect to sediment trap efficiency and effluent sediment concentration.

SEDCAD 4 is being used to design and evaluate erosion prevention and sediment control systems for surface mining, residential subdivisions, commercial properties including office parks, shopping centers, schools, airports, industrial sites, refuge transfer stations, golf courses, hydroelectric facilities, municipal, hazardous and low level nuclear landfills, and linear developments such as highways and utility lines. The program uses classic, well-established methodologies for hydrologic and hydraulic analysis. The SCS Unit Hydrograph method has been slightly modified to enable more accurate prediction of disturbed lands and forested areas. Hydraulic routing techniques, all channel designs, culverts and energy dissipaters were designed using well-established and broadly used techniques. SEDCAD 4 is also capable of predicting the effectiveness of sediment basins, sediment traps, silt fences, porous rock silt checks (check dams), and grass filters. Most of the sediment control procedures have been developed based on extensive research conducted at the University of Kentucky. Aggressive verification research programs have been conducted at UK, and are continuing. Sediment basins and traps are monitored both in the field and in a large-scale laboratory pond. Verification includes measurement of inflow and effluent stormwater, sediment concentrations, and particle size distributions.

The initial release of SEDCAD was in 1987, and the program is continually being upgraded by incorporating applied research from universities and government research facilities, feedback from users, and advances in operating systems, CAD software and computer capabilities.

If you have any questions, please contact Civil Software Design (515-292-4115 or <u>sedcad@cs.com</u>) and/or Dr. Richard Warner at the University of Kentucky (859-257-3000 ext. 217 or <u>warnerhofc@aol.com</u>).

# **SEDCAD 4** for Windows®

Design of Stormwater, Erosion, and Sediment Control Systems

#### What we did...

- Created the foundation for rapid future developments
- Stripped all code to basic equations
- Re-derived equations and wrote new algorithms
- Programmed for speed utilizing a 32-bit processor

#### Results...

- Windows® program, using familiar Windows® interface and printer drivers
- Virtually unlimited and unrestricted networking
- Dynamic design mode
- Add/delete/change structures and subwatersheds with a click
- Rapid full-screen editing

Silt Fence designs

- NRCS (SCS) TR-55 emulator
- Extensive HELP tables, figures and guidance
- Graphical viewing and outputs
- ... and much more!

#### Windows<sup>®</sup> 95 and higher

Fully implements Windows® 95 through XP using standards of graphical user interface (GUI) design

Use of Windows® printer drivers provides sophisticated report and extensive graphing capabilities

#### Networking is virtually unlimited and unrestricted

Junctions and branches are no longer used

Structures can be placed at any location and in any sequence

Large mines, subdivisions and landfills can be modeled in a single dynamic run

#### Dynamic design mode

The calculations are always running in background mode

Once subwatershed parameters

are entered, the peak flow, peak sediment concentration, hydrograph and sedimentgraph are immediately available to design the structure

Proceed from structure to structure, completing designs



#### Add/delete/change Structures and Subwatersheds with a click

Structures can be inserted anywhere

The impact of alternative structures can be readily evalutated

#### **Rapid Full Screen Editing**

Simply point-and-click to move to the desired input screen

F2 is gone forever (Yes!)

#### Silt Fence designs

Determine the sediment trap efficiency and effluent concentration

#### NRCS (SCS) TR-55 emulator

Emulate the TR-55 unit hydrograph and obtain a peak flow which closely matches TR-55

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#### Graphical viewing and outputs

Zoom in capability on all graphics

Print graphics using Windows printer drivers

Save graphic to file (.BMP, .EPS, .WMF)

#### ... and much more!

Extensive Help tables, figures and guidance

New 'C factors' and mining spoil erodibility 'K factors'

Curve Number tables available with a click

Semi-circular and circular nonerodible channels

Save and recall erodible particle size distributions

Save and recall utilities

SEDCAD Report Viewer

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#### Input screen for Networking



#### **Culvert Performance Curve Graph Results**

#### System Requirements

- Windows 95 or higher
- 32 MB of RAM (minimum recommended)
- 25 MB of hard disk space
- Intel 486, Pentium (recommended), or better or compatible processor
- 800 x 600 VGA video disply
- Mouse
- IBM compatible parallel port for hardware lock

#### Contact us for information on short courses!

Civil Software Design, LLC 2073 Lakeside Drive Lexington, KY 40502

Phone & FAX: 515-292-4115 (Ames, IA) email: sedcad@cs.com

## U.S. Price Sheet SEDCAD<sup>TM</sup> 4 for Windows<sup>®</sup> 95/98 /NT/2000/Me/XP

#### **New** SEDCAD 4 Package:

Quantity:	1	2	3-5	6-10	11-25	26-50
Price each:	\$1495	\$975	\$870	\$800	\$750	\$725

### Upgrade SEDCAD 4 Package:

Quantity:	1	2	3-5	6-10	11-25	26-50
Upgrade Price each**:	\$495	\$425	\$400	\$380	\$350	\$340

*Local*: loaded directly onto the hard drive, with a single user running the program at any one time. The software can be moved *easily* from computer to computer, but will maintain the single-user status per package.

\*\* Number of upgrades *cannot* exceed the number of installations you are currently licensed for. Valid SEDCAD 3.x serial numbers are *required* in order to receive the upgrade price. SEDCAD 3.x serial numbers that have been replaced with a "disk swap" or alternate set of disks are not applicable.

(U.P. = Unit Price):

# Newx U.P. New \$= \$
#UpgradexU.P.Upgrade\$=\$
Shipping: Fed-X 2-day (\$15.00) \$
Fed-XNextMorning(\$35.00)\$
Tax (Kentucky @ 6%) \$
Total \$

For upgrade price\*\*, list valid SEDCAD 3.x serial numbers:

Purchase Order Number:	Check Number:	(sorry, no credit cards yet)
Ship To:	Bill To:	
Name	Company	
Company	ATTN:	
Address	Address _	
City, State, Zip	City, State	, Zip
Phone		-
FAX		
email		

Please send, FAX or email orders to: *Civil Software Design, LLC P.O. Box 706 Ames, IA 50010-0706 FAX: 515-292-4115 email: sedcad@cs.com*