AN IMPORTANT MESSAGE ABOUT OUR RELATIONSHIP WITH CARLSON SOFTWARE

NEW UPDATES WILLL BE POSTED HERE: AN IMPORTANT MESSAGE ABOUT OUR RELATIONSHIP WITH CARLSON SOFTWARE

Please note: As of early 2025, neither **That CAD Girl** nor our sister company, **Carlson CAD Solutions**, are authorized dealers for Carlson Software.

Even though Carlson ended our dealership with only a few days notice, we've continued to support Carlson users with training, technical help and guidance on renewals and licensing. While we can no longer sell their products, we will continue to offer assistance to anyone using Carlson desktop software who needs help navigating their options.

Our whole-hearted commitment to being a trusted resource for all land development professionals includes recommending purchases of Carlson if and when we believe it's a good fit even though we cannot facilitate the sale ourselves.

We'll continue to offer advice, referrals and training wherever we can.

Scroll down to read more of the backstory and how we got here.

UPDATED 5/6/2025: I wish I had more to report, but I promised to keep you updated—and it's been a while, so I owe you one!

We're still hearing from past customers and new contacts almost daily—8 or 9 just this week—asking for advice, support and

referrals related to Carlson desktop software. It’s been both humbling and eye-opening to see how many of you continue to reach out to us, even though we’re no longer authorized dealers for Carlson.

As Bruce Carlson once acknowledged, Carlson CAD Solutions and That CAD Girl were the only dealers who focused on sales and support of their desktop software. Now that we are no longer in that role, it is understandable that many of you are still looking for another dealer to fill that gap.

So, what’s changed between us and Carlson? Not much, really.

We’ve been informed by Carlson Software’s legal counsel that they do not believe they’ve acted improperly or interfered with our business relationships. While we may see things differently, we’re moving forward in good faith, we are assuming they do not intend to interfere in the future, and are continuing to reach out to other dealers to offer support and send along leads when possible.

Dealers we have reached out to over these many months have been willing to talk and are, obviously, interested in the opportunity to increase sales by collaborating with us. Unfortunately, they’ve decided not to move forward at this time—it’s understandable that they are cautious, likely due to uncertainty about how such a partnership might be perceived by Carlson.

We plan to keep trying – and hope we’ll soon come to an understanding and find ways to work together that will benefit everyone.

In the meantime, we’re still here, still offering support and training for Carlson desktop products, and we’re also working on some new partnerships we’ll be announcing soon. Keep an eye on

our website for updates!

And as always—thank you for your trust, support and friendship over the years.

— *Jennifer*

UPDATED 2/24/2025: Because we believe that Scott Griffin, and Carlson's legal counsel, continue to unfairly characterize the details of the termination and its aftermath in emails TO US and with customers copied, I am linking to the email and termination letter here in the interest of full transparency.

UPDATED 2/9/2025: I am sincerely kicking myself for not doing this sooner but, if you're reading this, I'd ask that you check out **Dave Mollenberg** and his team at Alpine Navigation in Grand Junction CO.

From their website:

> *Alpine Navigation offers service, sales and support for the Western Slope of Colorado and surrounding areas in the United States. We focus on the needs of the Heavy Construction, Mining, Aggregates, Agriculture, Public Works, Federal Lands, Energy, Ranching & Resort industries.*

Until recently, **Alpine Navigation** was an authorized Carlson Software dealer specializing in sales of hardware and equipment. After Carlson CAD Solutions and That CAD Girl were terminated as dealers on 1/6, Alpine came to our rescue and helped our customers by following up on our leads and processing orders for Carlson desktop software and maintenance renewals.

Shockingly, Carlson terminated Alpine’s dealer contract only 2 weeks after, and because, we started working together. Their termination was effective immediately as of 1/22/2025.

So, please, if you are in Dave’s neighborhood… give him a ring and show him some love.

UPDATED 2/4/2025 We are incredibly grateful for the calls and emails of support we’ve received from our customers during this transition.

While we have been hesitant to post this, due to many requests, we are sharing the contact information for those at Carlson to whom you may wish to express your support of That CAD Girl and Carlson CAD Solutions, as well as your opinion on the termination of our Carlson dealer contract.

Email: Info@CarlsonSW.com AND Support@CarlsonSW.com

Phone: 606-564-5028

ORIGINAL POST CONTINUES BELOW

One Door Closes and Others Open

On Saturday, December 28, I received an email and letter advising me that Carlson Software was terminating the dealership agreements for both Carlson CAD Solutions and That CAD Girl, **without cause**, effective Monday, January 6, 2025.

This decision came without any warning or explanation and took us completely by surprise.

In order to comply with their decision, we’ve removed all

options to purchase Carlson products from Carlson CAD Solutions and paused software-related payments in our online portal.

Our Top Priority: You, Our Customers
Right now, our focus is on supporting our customers across the US. We put the highest value on the relationships we have built on trust and respect over the last 17+ years as Carlson Software dealers.

Carlson CAD Solutions and That CAD Girl will continue to be a resource for sales advice, tech support and training for Carlson's Desktop Software!

With regard to sales of new licenses, maintenance and upgrades – we are working to connect with other Carlson dealers so that, if desired, our customers will have a closer, local option in addition to the support we'll offer. The holiday timing hasn't made it easy, but we're doing everything we can to make this as smooth as possible.

To Carlson Dealers:
If you're interested in helping our past customers in your region and haven't heard from us yet, please call me directly at 254-417-8351.

To Our Customers:
If you've been working with Claire, Jenny, Joni or me on pricing, proposals, upgrades, maintenance renewals, tech support or anything else, please don't hesitate to get in touch. You can email us, call our main line at 804-227-5766 or call my cell directly at 254-417-8351. We'll do everything we can to help with any outstanding issues.

What's Next?
That CAD Girl Webinar Series & Customer Portal: These services aren't going anywhere! In fact, we're shifting our focus back to

what we love most—sharing our expertise in CAD and Carlson Desktop Software while providing the very best training and customer service available.

We're working on adding more and better webinar content featuring some exciting new presenters. As a thank-you for sticking with us, ***and for a limited time***, we're offering one year of free access to our Webinar Series and that will also include access to your Customer Portal for self-service management of your Carlson serial numbers and maintenance reports.

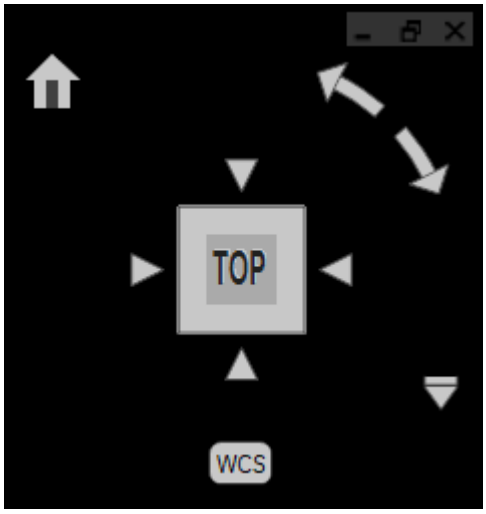
We'll keep you updated on new offerings through our newsletter, CarlsonCADSolutions.com and here on ThatCADGirl.com.

What Hasn't Changed?
Our commitment to YOU—helping you buy what you need and use what you buy.

This is a big change, but we're looking forward to what's ahead and can't wait to share the next chapter with you. Thank you for all your support—we owe the last 17 years of success to you!

Managing your View Cube in Carlson 2024 with IntelliCAD

When I first launched Carlson 2024 with IntelliCAD, my first reaction was, “What’s that cube-thingy doing in my drawing screen?? And how do I turn it off?”. The formal name for the “cube-thingy” is a **VIEW CUBE** and, as I learned, turning it off wasn’t as easy as I thought.

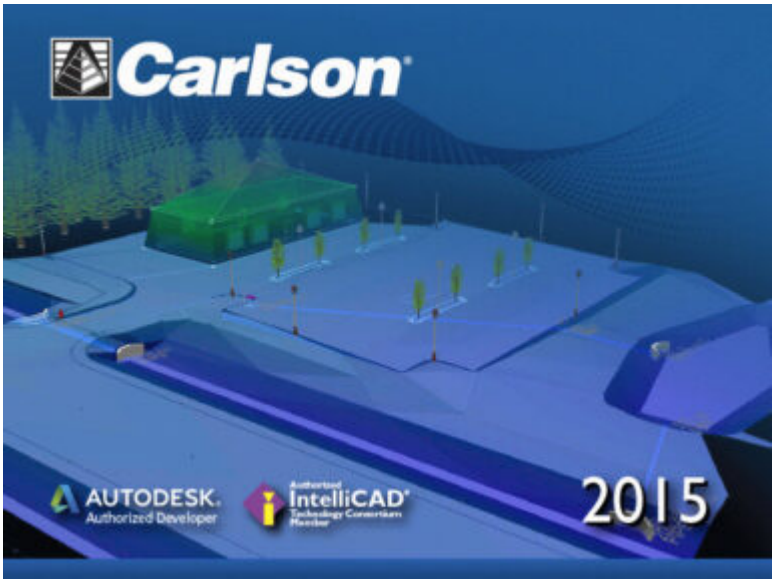


Here is what Carlson’s IntelliCAD manual explains about the VIEW CUBE:

> *The view cube is a navigation tool that indicates the current viewing direction and allows you to switch between preset views and custom viewing directions. You can also use the view cube to change the coordinate system and switch between orthographic and perspective projections.*
>
> *The view cube displays in the current viewport when working in 2D model space or a 3D visual style. It becomes active when you move the mouse over it, and it can display with transparency or not at all when inactive.*

I decided to upload a very short video that shows you how to turn it off – in case, like me, that’s your preference!

Carlson Tip of the Day… List of improvements in Carlson 2015 programs



General

- AutoCAD 2015 – Added support for this new version.
- IntelliCAD 8.0 – Direct support for 2013 DWG file format. Added 64-bit version. New features including support for dynamic entity reactors, layer states and improved ddvpoint interface.
- Google Earth – Added support for exporting 3D Faces.
- Import 3D View Model File – New command to create drawing entities from a 3D model file.
- Export 3D View Model File – New command to create a 3D model file from selected drawing entities.
- 3D Model Library – New command to prepare the 3D models to use in the 3D Viewer commands.
- Toolbar Manager – New command to save status of toolbars

and allow migrating toolbar settings between versions.

- File Selection – Added list of subfolders within current folder and button to move up a folder level. Added option for warning when selecting a data file that is not within the current project folders.
- Textures – Added 40 new textures for 3D viewing.
- Settings File Manager – Added function to compare two settings files and report differences.
- Leader With Text – Added option for horizontal tick and option to create with Mtext.
- Join Nearest – Added filters for common colors and linetypes.
- Join Polyline By Trace – New command to join linework into a polyline with prompts at intersections

Survey Commands

- Field To Finish – Added special pipe feature coding with ability to create pipe network (.sew) file. For tree feature coding, added option for drip as diameter instead of radius, added option for solid circle for trunk and option for relative tree size for the symbols. Added control for separate layers for the point attribute block and point node. Added new AFIT special code for making a curve tangent through a series of three curve points. Added method for dynamic templates with variable horizontal and vertical offsets by using the OH and OV special codes. Added settings file default distinct point layer prefix/suffix. Added separate text size settings for attribute text labels and point block attributes.
- SurvNET – Added error report for individiaul observations to track down blunders. Added import for TDS GPS vectors.
- Edit Process Level Data – Added support for processing

with zero horizontal distances.

- Carlson Cloud – New command for communicating with SurvCE for sending messages, data files and crew locations.
- Report Distance Scale – Added methods for grid/ground factors on-the-fly in addition to a fixed factor.
- 3D Transformations – Added 3D coordinate transformations.
- Point Group Manager – Added method to create point group by offset distance from alignment polyline.
- Move Point Attributes With Leader – Added controls for attribute order and ability for curved leaders.
- Import Text/ASCII File – Added method import from text with fixed widths and method to use inclusion/exclusion perimeters.
- Legal Description – Added method to report station/offset using a reference centerline. Added method for reporting with geodetic mean angle and geodetic distances.
- Cut Sheet – Added method to get station/offset from the point description coding. Added field for design point description.
- Offset Points By Interval – New command to create offset points along an alignment.
- Label Coordinates – Added options to include a description, to use Mtext, to draw the labels at an angle and option for mleader.
- Draw Legend – Added method to put each symbol or a specific layer.

Civil Commands

- Draw Profile – For paper space profiles, added method to use an existing layout as a reference template for the new layout. For the horizontal label box, added option for horizontal text in addition to vertical. For pipe

profiles, added settings to label inverts by left/right order, added option to draw cutoff style pipe extensions, added option to create labels as MText, added option for flow arrow in middle of pipe, new option for labels above the pipes, added justification settings per label, added setting for separate layer for pipe thickness than pipe profile and option to connect rims with a polyline for a simple surface profile. For Label Line/Point crossings, added option to label elevations at crossings, added method for labeling GIS attributes, added method to label points of selected descriptions within offset tolerance, added option to label CL deflections and added option to avoid label overlaps. Added special CL stations for break point station/elevation labels plus new prefix/suffix settings. For EOP profiles, added new break point and EOP leader style to the start of the labels, added option to label ground profile on road EOP profiles and added controls to select which profiles are EOP, road and ground. For the manhole name within circle option, added setting to put the name and number on separate lines and added the option to auto shift the labels to avoid overlaps.

- Draw Sections – Added option to label cut/fill volumes per station. Added separate settings for pipe crossing layers for decimals on pipe size, offset and elevation.
- Draw Plan View Sheets – Added option to set station range to draw.
- Input-Edit Centerline – Added Fit Curve method to apply speed table to all PIs in centerline.
- Input-Edit Profile – Added method to apply speed table for vertical curve lengths to all PIs in profile.
- Label Station/Offset – Added method to use a TIN or grid surface for the elevation reference.
- Draw Lot Setback – Added method for separate corner side

setback amount.

- Move Spot Elevations – New command to move spot labels and update elevation to new position on reference surface.
- Line Of Sight Viewshed – New command to calculate line-of-sight from a point and eye height on a surface.
- Draw Spot Elevations – Added option for label only and option to pick an entity instead of a point.
- Cut/Fill Labels – For points method, added more options like separate layers for existing and design. For the TIN method, added options for deep cut/fill labels and option for marker symbol.
- Smooth Polylines – Added method to smooth polyline between selected points.
- Triangulation File Utilities – Added function to color TIN within inclusion perimeter.
- Road Stripe Library – New command to setup named sets of road stripes with offsets, colors and styles.
- Draw Road Stripes – New command to draw linework for road stripes.
- Linear 3D Object Polylines – New set of commands to manage alignment polylines for 3D Viewer commands for linear 3D features such as fences or guard rails.
- Label Profile On Centerline – Added label position by left/right in addition to above/below. Added prefix/suffix and station interval settings.
- Offset 3D Polyline By Grade Table – New command to offset a 3D polyline using the distances and slopes from a template grade table.
- Road Network – Added settings for station range to process for each road.
- Mass Haul Analysis – For borrow pits, added offset from road to account for offset travel time.
- Sections From 3D Polylines – New command to create cross sections from 3D polylines.

- Surface 3D Viewer – Added option to show contours. Added functions to edit triangulation by swapping edges, adding breaklines, removing points, removing triangles or editing point elevations.
- Surface 3D Flyover – Surface model is kept in sync with any edits in CAD so that the 3D view is automatically updated. Added method to add models to the scene by screen picking plus the ability to pick models in the scene to edit properties (location, rotation, scale). Added function to record a movie. Added method to map textures by color and method to scale textures. Added run view mode for detached from moving vehicle. Added option to show contours. In pick mode, display real-time coordinate and elevation for mouse position on surface.
- Motion 3D Viewer – New command to assign path polylines with speeds to 3D models and the camera.

Hydrology Commands

- Design Detention Pond – New command with all steps for detention pond design plus support for multiple rain events.
- Pipe Culvert Design – Added method for tailwater by channel or discharge rating and added overtopping analysis.
- SCS Rainfall Library – New command to define an SCS data reference library for rain events.
- Rational Rainfall Library – Added import of IDF tables from comma separated text files.
- Collision Conflict Check – Added support for checking unlimited pipe networks and using the report formatter.
- Sewer Network Design – Added option for junction loss for pipe connections including laterals. Added method for

tailwater at each outlet. New method to set symbol rotation by screen pick. Added graphic preview during .sew file selection.

- Lateral Design – Allow for multiple lateral connections at manholes.
- Identify Pipe Polylines – New command to ID or list pipe data assigned to 3D polylines.
- Import Network From 3D Polylines – Added method to control order of names by design order, elevation or polyline direction. Added method to set rim elevation by depth.

GIS Commands

- Label GIS Point Data – New command to create text labels or block with attributes for selected GIS attributes.

Field Commands

- Drivers: Upgraded many drivers from the SurvCE updates.

Geology Commands

- Define Mining Model – Added Mine Model collection of surfaces for modeling only mineable strata already adjusted for recovery, roof/floor gain/loss and minimum parting. Renamed “Pre-Calc Model” to “Geologic Model”.
- Geologic To Mining Model – New command to adjust a Geologic Model to make a Mining Model.
- Drillhole Database – Added support for MS Access .accdb format.
- DHDB – Added drillhole database import/export to DHDB

format.

- Import From Coal Section – New command to create pit/channel samples from coal sections.
- Configure Section Info – Added method to set folder for section drawing to allow storing the section info on a server.
- Import/Export Coal Sections From Text File – New commands to import/export coal sections from/to text files.
- Grid Files – Added option to store .grd files as binary to improve read/write speed.
- Grid File Utilities – Added method to call other GFU macros and pass parameters from another macro. Added sin() and cos() functions for grid math. New dialog interface including dialog for creating IF statements. Added 3D window to show grid while modified.
- Draw Geologic Column – Added method to draw in 3D with strata sections sized based on grade parameters. Also added 3D draw method as 3D lines. Added method to label grade names and added separate layer settings for attribute labels. For labels in 3D, added options for rotate labels vertical and draw label leaders. 3D Viewer Window now shows 3D text generated by Geologic Column.
- Drillhole Report – Added method to report grades for each strata.
- Drillhole Core Images – Added method to draw the report to the drawing and added option for labeling depth or elevation.
- Draw eLog – New command to draw graph of selected attributes from an eLog LAS file.
- Create Drillhole from eLog – New command to create drillholes with strata classification using the eLog paramters.
- Trim Isopach Within Fault Zone – New command to isopach elevations and break contours at fault zones.

- Draw Fault Labels – New command to label fault deltas.
- Draw Fault Symbols – New command to draw +/- symbols for faults.
- Apply Faults To Grid – Added method to handle thrust faults. Added method for processing multiple grids at a time.
- Surface Mine Reserves – Added Adjust Pits Manager for adjusting pit perimeters with real-time quantity updates.
- Draw Grade Boundary – New command to draw boundary polylines around area with specified grade.
- Block Model Statistics – Added min/max/average elevation and depth to the report. Added level # to report name.

Surface/Underground Mining Commands

- Ribbon – Added a mining ribbon for running with AutoCAD 2012 and higher.
- Import Pit Points – Added method for user-defined input file formats.
- Import Polyline File – Added method to draw 3D polylines from sequence of top/bottom points for blast holes.
- Label Property Lines – Added option to label owner or id labels and added setting for label layer.
- Surface Equipment Timing – Improved calculation speed by 25%. Added method to use table of production targets with variable equipment usage to adjust to meet the targets.
- Underground Timing – Added option for transparent hatching and for buffer hatching.
- Dozer Push – Added support for push cut area by closed polyline. Added method for reporting single, average push. Added option to keep existing polylines, to draw centroid symbol and to label total push distance. Added settings for label text size, layer, style, decimals and prefixes.
- Regrade Backfill – Added bench option to cross section regrade design.

- Range Diagram – Added dimensions for all angles and distances. Added options to output final profile and to output parameters to sequence file.
- Design Ramp Profile – New command to create a ramp profile between two surfaces.
- Ramp Bench Polyline Generator – New command to design bench pits using polylines.
- Edit Dragline Sequence – New command to edit the steps for pit cuts.
- Make Solid From Points – New command to create a solid model from a cloud of points.
- View Solid – New command to view a solid model in the 3D viewer.
- Draw 3D Mine Model – Added method to make model from coal sections and pillar/perimeter polylines.
- View 3D Surface History – Added support for displaying TINs.

Construction Commands

- Define Layer Target/Material/Subgrade – Added support for up to 7 subgrades.
- Color TIN By Layer – New command to color the surface TIN using the color assignments in Define Layer Target.
- 3D Drive Simulation – Added method to apply textures to design layers in addition to colors for viewing in 3D.
- Tag Segments To Skip Linear – New command to tag polyline segments to skip for material linear quantities.

CADNet Commands

- Merge Raster Files – Added method to automatically select

control points.
- Import SketchUp File To Drawing – New command to create drawing entities from a SketchUp file.
- Import PDF File – New import engine with ability to use layers for PDFs with layers.
- Drawing to 3D PDF – New command to create a 3D PDF from selected drawing entities.
- 3D Viewer to 3D PDF – New command to create a 3D PDF from a 3DX file from the 3D Viewers.

Point Cloud Commands

- Faro – Added direct import method uses Faro toolkit.
- E57 – Added support for importing industry standard e57 format.
- PLY – Added import for PLY format.
- LAS – Added method to use LAS classification for coloring and selection.

Data Conversions

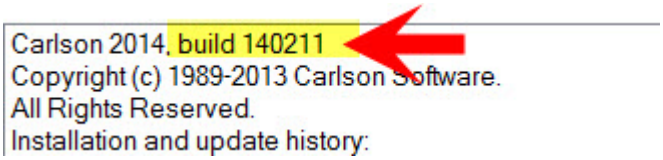
- 12D – Added import and export for pipe networks plus support for some more entity types.
- Canada – Added support for NTv2-NAD27-83
- Geoids – Added support for Canada CGG2010 and CGG2013n83, Sweden 08_rh2000, Sweden 08_rh70, Poland 2011 and Georgia 2012
- Iowa – Added projections for Iowa Regional Coordinate System
- Ireland – Added national grid projection.
- KOF – Added function to draw linework from KOF files.
- MDL – Added support for binary data within FSC file.

- Norway – Added support for N2000 format.
- SketchUp – Added import for SketchUp models in Surface 3D FlyOver
- SurvCE – Added import for points with photos in Google KML format as created by SurvCE

New Update for Carlson Survey 2014 with Embedded AutoCAD (OEM) is available

Carlson Software posted a new build with updates to Survey 2014 with embedded AutoCAD on 7/14/2014. The latest build can be downloaded here: **Carlson Software Downloads Page**.

To find your current "build", open your Carlson desktop software and go to the Help menu and click About Carlson. The current build is listed on the top line in the text window and corresponds to the date it was posted. For instance, the build shown below – 140211 – was released on Feb 11, 2014.

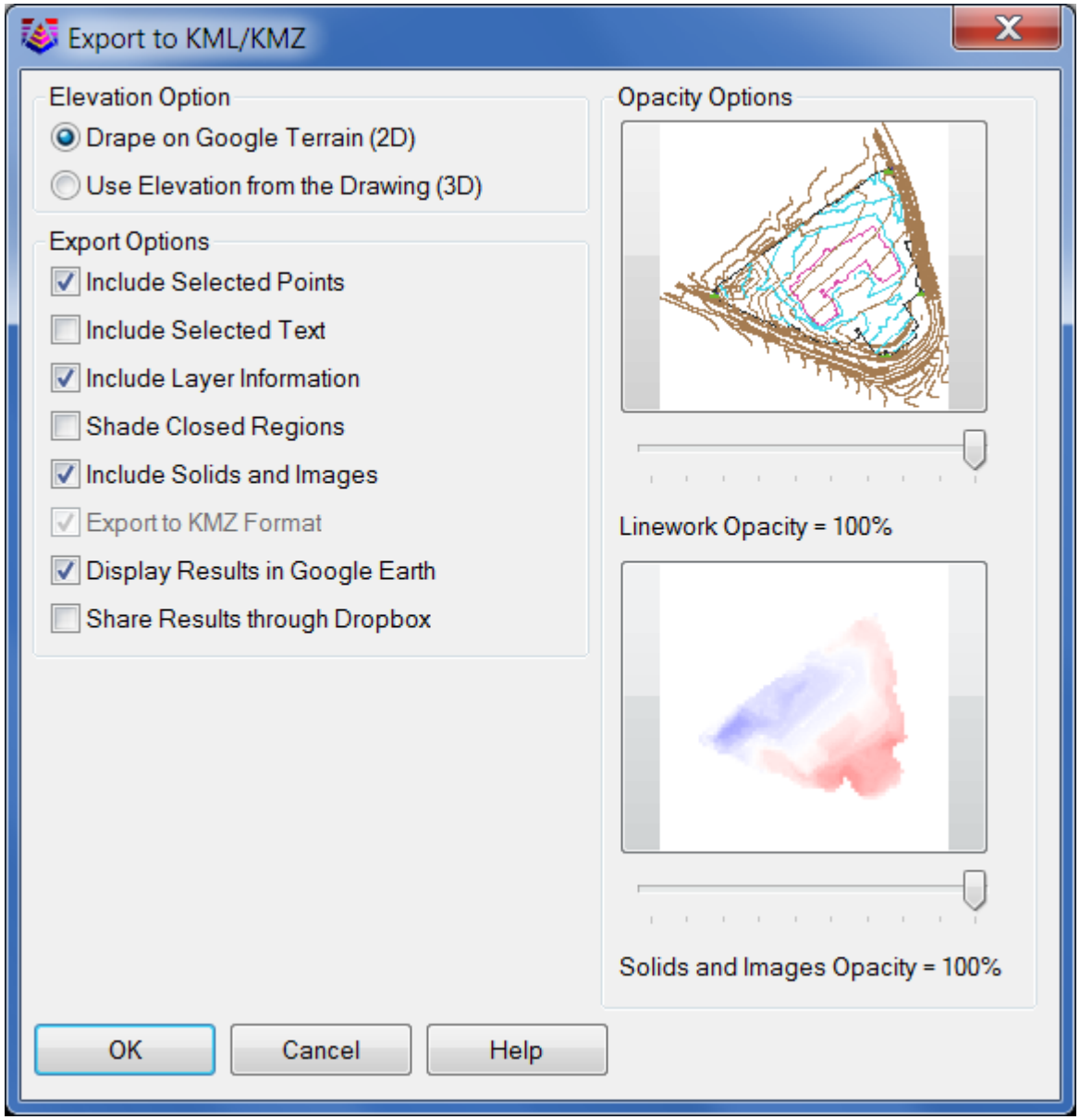


Did You Know… About Carlson's Export to KMZ (Google Earth) Command?

Carlson Software gives you the ability to export drawing entities directly to the Google Earth application or, alternatively, to a .kml or .kmz file that can be opened in Google Earth. At this time Carlson supports the export of points, polylines, text, solids, images, lines and arcs to Google Earth or .kml/.kmz files.

In Carlson 2014 they have also included the option of sending the Google Earth file directly to a Dropbox account for sharing with clients or other project team members.

The Export to Google Earth command is found in the File menu in all Carlson desktop programs.



Carlson Geoid12 files for SurvCE

For those who have been waiting, patiently or not, for a Carlson update that will allow you to create a Geoid 2012 file for your Carlson SurvCE collector – here is the update from Carlson.

Carlson 2013 Has Been Released

Carlson released the 2013 version of their desktop products today. This includes: Civil Suite, Civil, Survey, Hydrology, GIS, Takeoff, Construction, Point Cloud, Geology, Surface/Underground Mining and Natural Regrade.

The 2013 embedded-AutoCAD versions of Takeoff and Survey have not yet been released.

Unlike previous versions of Carlson that support running on top of IntelliCAD or AutoCAD products 2000-2012, **Carlson 2013 can only be run on IntelliCAD or AutoCAD products 2004-2013**. This includes AutoCAD, Map, Land Desktop and Civil 3d. Also, anyone using the FREE IntelliCAD that comes with Carlson is eligible for a FREE GIS Starter Kit from Esri which includes ArcMap.

You can download Carlson 2013 here.

If you are using 2012 and are current on your annual maintenance contract, you can click here to look up your new 2013 serial number online. You will need to enter your contact information and your 2012 serial number in order to generate the 2013 serial number. You can find your serial number by opening Carlson Software and going to Help > About Carlson Software > Change Registration.

If you have trouble finding your serial number or would like to know the cost to upgrade to 2013, please email me with your request.

Click here for the full list of improvements to Carlson 2013

Click here for improvements to the General commands in 2013

Click here for the additional data file & conversion support in Carlson 2013

Click here for improvements to Survey commands in 2013

Click here for improvements to Civil commands in 2013

Click here for improvements to Hydrology commands in 2013

Click here for improvements to GIS commands in 2013

Click here for improvements to Takeoff commands in 2013

Click here for improvements to Point Cloud commands in 2013

Click here for improvements to Geology commands in 2013

Click here for improvements to Surface/Underground Mining commands in 2013

Click here for improvements to Natural Regrade commands in 2013

Carlson 2010 Sneak Peek

The highly anticipated Carlson 2010 release offers clients hundreds of new or improved features from that found in Carlson 2009 and continues Carlson Software’s track-record of delivering responsive solutions to client-requested technology needs.

How Does Carlson Support Their Users? Ask David Farina

I'm going to post a LONG email stream between one of my clients, David Farina, Bruce Carlson and Dave Carlson. You can see the new feature that David requested and Bruce and Dave's responses. David received a "development" version of the new features approximately a week after submitting this request.

I asked him for a statement describing his experience with Carlson:

> *Recently I found that the Time of Concentration input boxes were inadequate under the hydrology portion of Carlson Civil Suite so I emailed a description of the problem to them. I was very impressed to get a phone call the same day. They discussed the problem with me and had a revised program update to me in under a week. I've been emailing Autodesk for over a year on problems with Civil 3D and never heard a peep. Needless to say I'm very happy with the customer service I have received from Carlson thus far.*

Here is the original question from David Farina on March 4, 2009:

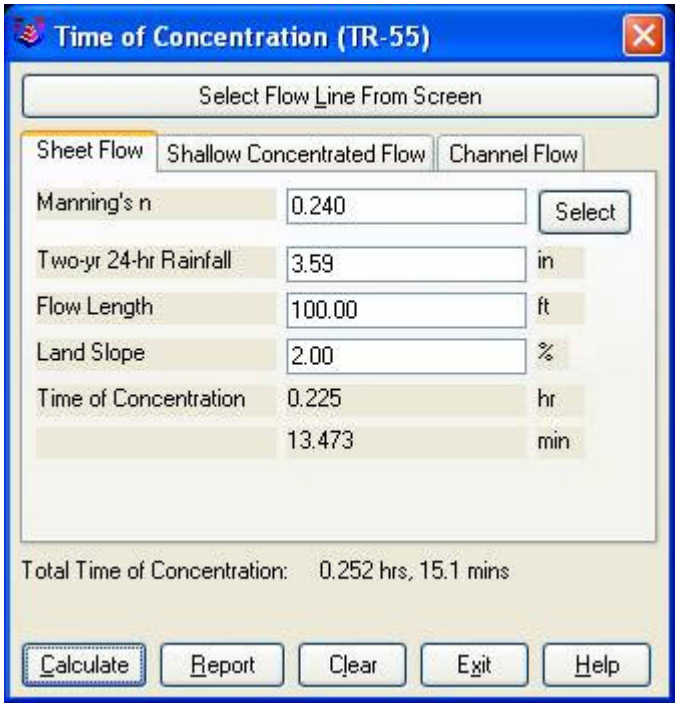
> *Jennifer,*
>
> *I was going through a mock project to learn the hydrology part of Carlson and noticed a critical deficiency in Time of Concentration input. The review agencies around here want to see the TR-55 method. First, the TR 55 minimum sheet flow*

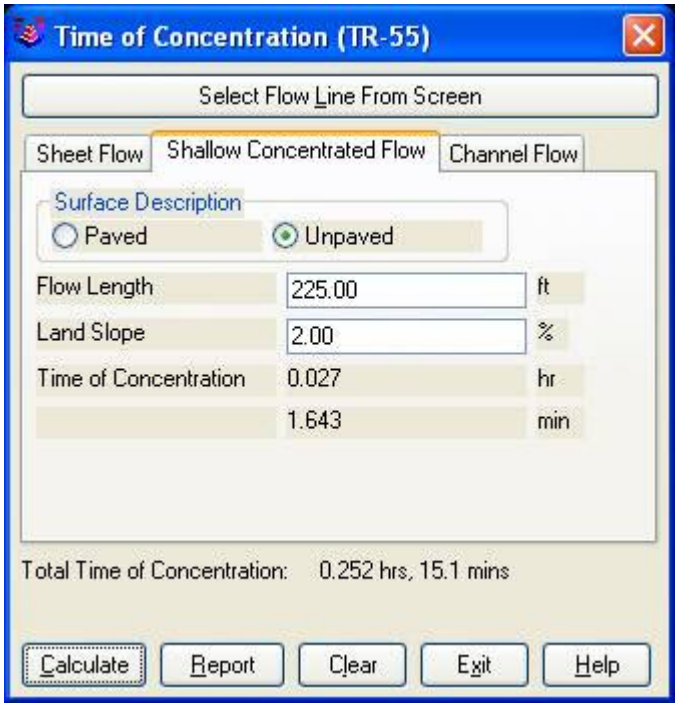
needs to be 100’ instead of 300’. They recently changed it per the TR-55 Web site. Second, I don’t think I’ve ever had a project where you didn’t have to split one of these flow types into 2 or more mannings roughness areas.

For example: a flow path that starts on dense grass for 50’ then passes over asphalt for 75’ and back to grass for 200’ would need to be calculated as follows:

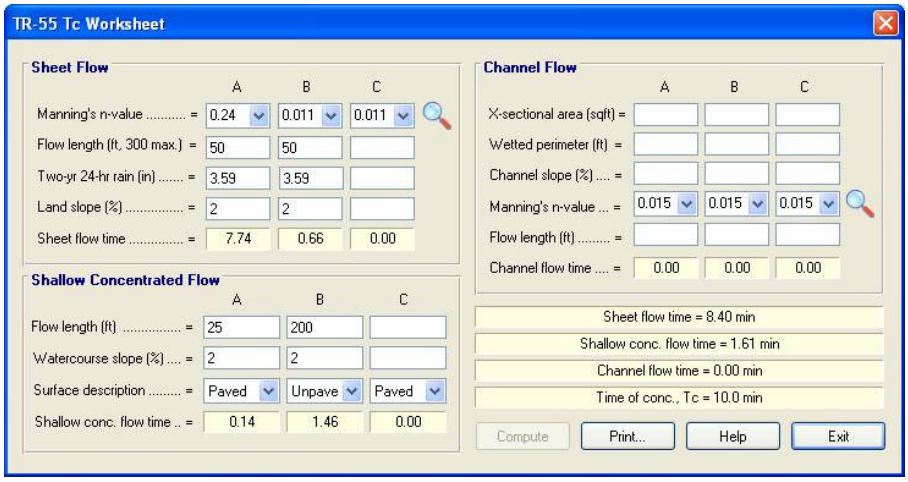
Sheet flow 50’ Grass -> Sheet flow 50’ Asphalt -> Shallow Concentrated flow 25’ Paved -> Shallow Concentrated flow 200’ UnPaved.

But as you can see the Carlson input only allows for one entry per flow type.

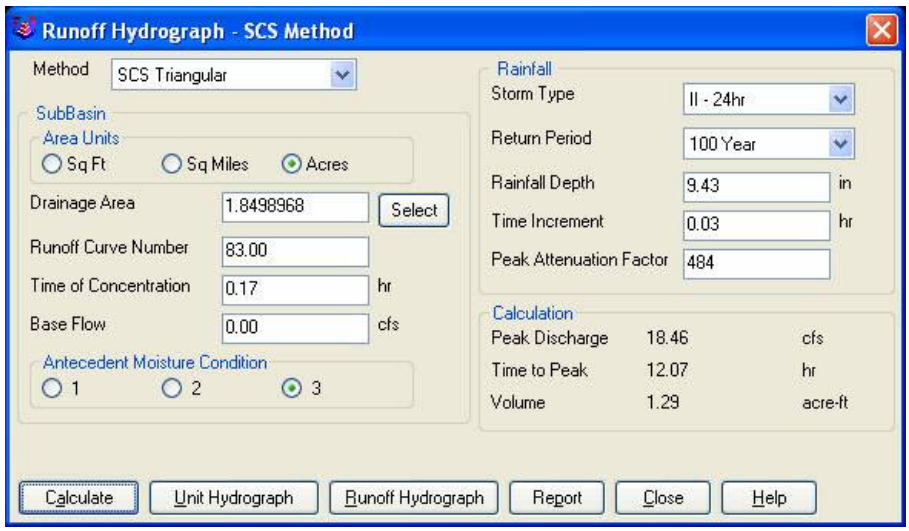


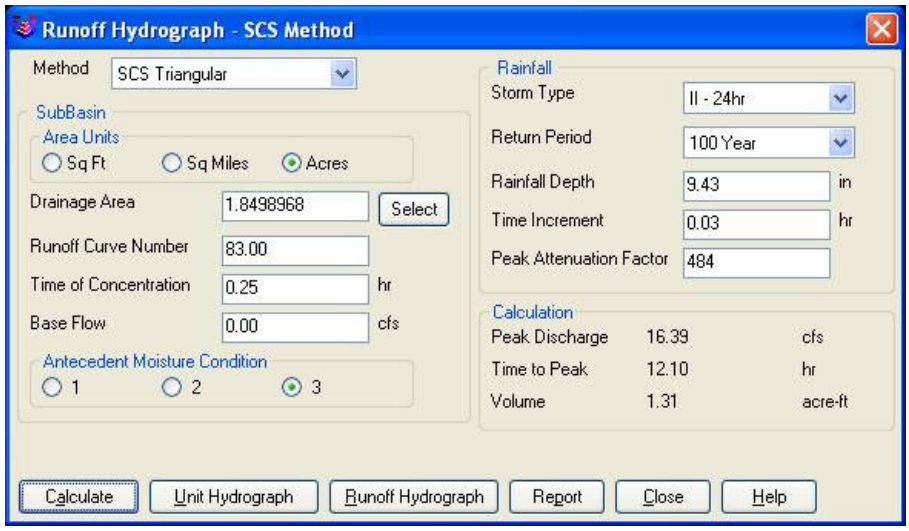


Below is the Intellisolve version: Notice the A, B C

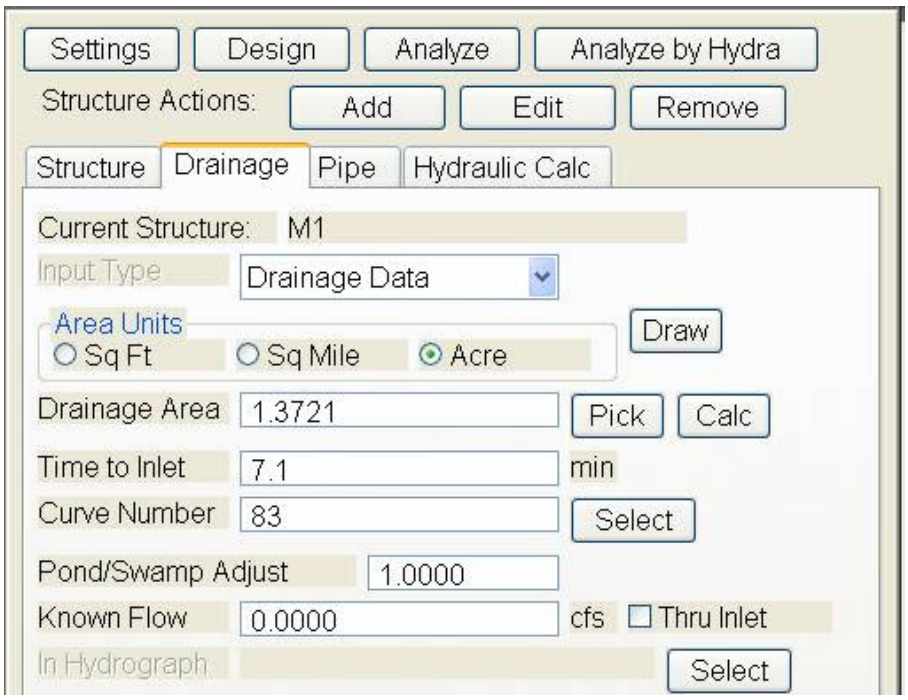


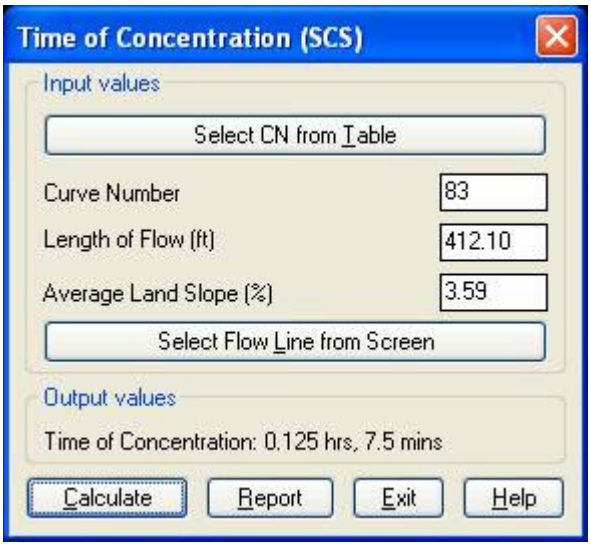
There is a 5.1 minute difference in TC results which results in a 2 CFS difference in the 100yr example below:





If the above example is that different then I am also concerned about how the Time to inlet is calculated in the example below:





Was the SCS method used to get the 7.1 min value?

Notice the 7.5 value in the TC dialog to the right.

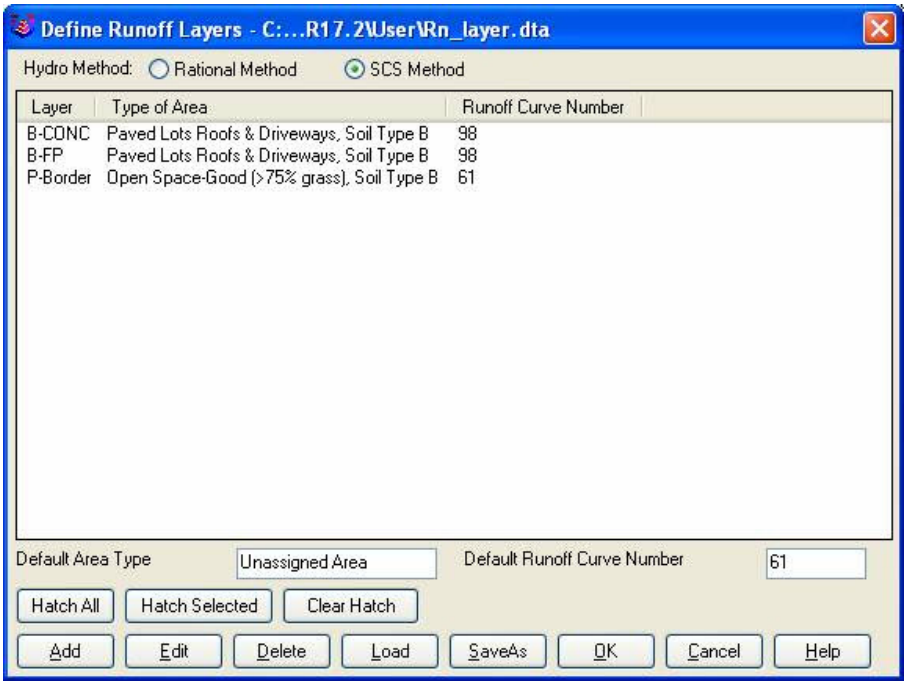
This was the value if I SELECT FLOW LINE FROM SCREEN and pick the path that the dialog on the left generates.

Can I generate a report of how the time to inlet was

calculated?

Maybe there can be a button next to the Time to inlet to select TR-55

Maybe Mannings coefficients can also be put into the WATERSHED->DEFINE RUNOFF LAYERS to be used for this calc as the flow path passes through each polyline area the same way Carlson already calculates the composite CN.



Will any of this matter if we get HydroCAD and link it to Carlson?

Just food for thought.

Thank You,

David Farina

Senior Designer

I forwarded David's question onto Bruce Carlson, President of Carlson Software, and Dave Carlson, Director of Programming, and received this response from Bruce:

> *Folks: Excellent input—this will find its way into the next release for sure. We've spent a lot of time studying Haested and matching numbers there on pipe flows in culverts, for example, covering all conditions—but do need to put to bed Time of Concentration for approved defaults and sub-catchment conditions as they vary within a watershed area. This Intellisolve example is really helpful. Also, I took in input at Jennifer's Statesville, NC presentation Dec. 2007 that mentioned the new 100' default and also mentioned:*
>
> *Using Q=CIA, there are new "rules" being published that using larger pipes or it may be larger drainage areas, there is an added multiplier in the form Q=CIA*Q1 where Q1 is a table of values. I didn't get the full details, but we need to research this.*
>
> *And in storm sewer design, if we are compositing the calc of time to inlet using a "short-form" SCS-style method, based on percentage area of various land uses and associated runoff coefficients, we need to have a Report button that documents the results for full vetting and reporting out by users, and we need to incorporate an additional auto-calculated, long-form TR55 time of concentration there as well that uses sheet flow, channel flow and shallow concentrated flow. One key in all this is to be able to auto-distinguish these flow types from the DTM and land uses and have the forms filled out with default values, which the user can change.*
>
> *Question I'm curious about. Say you built a gentle 6'wide, 1% slope swale with 6:1 side slopes, hardly noticeable, mowable, between lots in a subdivision. Would the flow in*

that be treated as shallow concentrated flow or channel flow? When would one condition end and another begin, by definition, so we can get real precise on auto-calculating these using layers/land use types and DTM values?

Good stuff, and it will get done.

Bruce Carlson, PE

Pres., Carlson Software

David added the following:

I think when to use channel flow should be determined by the width of the bottom of the channel and hence how deep the channel gets on an 2yr storm 24 storm.

You could have a channel with 1:1 side slopes but if the bottom was 50’ wide and the flow path started in the channel then

the first 100’ would still be sheet flow in my book. Unless of course a huge amount of water was entering the channel from another basin.

I think the concentrated and channel flow times (being in the fraction of a minute range) are so small and have such a small impact on overall time

compared to sheet flow (fraction of an hour) that you could pick an arbitrary number like 5’ wide bottom and smaller is channel flow and not upset the model.

Sheet flow probably makes up 80 to 90 % of overall TC if it is over grass.

Anyone disagree?

Thank You

Dave Carlson sent this on March 11, 2009

Hi David,

Here's an update to the Tc by TR-55 routine that allows unlimited number of breakouts. This update is for Carlson 2009 on Acad 2007-09. To install, unzip and copy the arx to the Carlson2009LSP folder. Let me know if you need a different version or have more suggestions.

For the Storm Sewer Network routine, I put it on the to-do list to add a Select button next to the Tc to show the components that make up the Tc like the Select button does for CN. Also we will looks at adding Manning's n to the Define Runoff Layers for use with Tc calcs.

Thanks for the input.

Dave

Originally posted on **Carlson Connection** by Jennifer Dibona

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Coming in Carlson 2010

I'm not privy to the "official" list of coming updates, but I can share a few things that I know will be in the next release. Most of these come from "wishlist" items I have

submitted on behalf of my clients.

The folks at Carlson are welcome to add their 2-cents in the Comments of this post or on Direct From Carlson.

Option for placing building footprint a distance off the building setback line.

Currently, the LotNet command places the building footprint exactly on the midpoint of the building setback line. We heard the request several times to have the option of placing the footprint some distance behind the setback line. It will be in the 2010 release.

C & G Survey

Instead of having two separate survey programs, Carlson will be incorporating C & G as a separate set of menus in Carlson Survey in 2010.

Basic IntelliCAD Menu

If you're running Carlson on top of an AutoCAD-based program, you have an icon or menu option to switch over to an AutoCAD menu that has basic Draw commands such as line, pline and text and basic Modify commands such as copy, explode and pedit. Although it's not easy to get to right now, IntelliCAD has a similar set of menus and toolbars. Carlson 2010 stand-alone with IntelliCAD will have a menu item and toolbar icon allowing you to easily switch over to the IntelliCAD menus and then back again to the Carlson menus.

Lookup table of curb slopes for super-elevation transitioning

This new feature will handle curb transitions like those shown in this NC DOT detail drawing.

Originally posted on **Carlson Connection** by Jennifer Dibona