3 Sessions: Site Selection and Feasibility Studies

A Virtual Classroom demonstrating site selection and feasibility studies using Carlson to evaluate development constraints, compare grading options and estimate construction costs.

Site Selection and Feasibility Studies with Travis Maxwell shows how to evaluate commercial, industrial and residential sites in Carlson before detailed design. Sessions cover assembling imagery and terrain, reviewing floodplain and wetland constraints and using SiteNet to compare grading alternatives and cut/fill. The follow-up applies RoadNet and LotNet to residential road and lot grading, driveway and pad design and construction cost estimates.

Key Topics:

- Carlson project setup, coordinate systems and Google Earth imagery and boundary exchange
- Carlson terrain imports, contour generation and GIS shapefiles for reviewing site constraints
- Carlson SiteNet target layers, grading boundaries and existing and proposed surface checks
- Carlson cut/fill analysis, earthwork balancing and soil import and export comparisons

- Carlson pad grading, retaining wall concepts and 3D polyline tools for grading alternatives
- Carlson SiteNet unit costs using line lengths, closed polyline areas and block counts
- Carlson RoadNet and LotNet for subdivision layouts, building pads and lot grading transitions
- Carlson storm and sewer quantity reports, pipe depth summaries and utility network tools
- Carlson road templates, subgrade definitions and earthwork quantity comparisons

Descriptions, transcripts and other details of these recordings have been AI-generated and may contain errors.

These sessions were presented by Travis Maxwell.

Travis Maxwell starts site feasibility with GIS data, flood review and SiteNet earthwork.Travis Maxwell compares grading alternatives, balances cut/fill and estimates construction costs.A follow-up on residential lot and road grading, utilities and cost estimates in SiteNet, RoadNet and



LotNet.



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6 Sessions: In Depth Carlson Hydrology

A Virtual Classroom providing in-depth Carlson Hydrology training from beginning to end, with practical hydrology design workflows

This six-session In Depth Carlson Hydrology class with Travis Maxwell goes from setup through advanced detention design in Carlson Civil and Hydrology. Day 1 covers libraries and rainfall data, Rational and SCS methods, Civil 3D data and terrain, storm network layout and hydraulic grade line and spread analysis. Day 2 adds utility crossings, HydroNet detention and hydrographs, pond grading and stage-storage, underground chambers and

HydroCAD exchange.

Key Topics:

- Carlson Hydrology module overview and setup
- Sewer and storm network configuration
- Use of SCS and Rational methods for runoff and detention
- Inlet libraries, rainfall data, and HydroNet integration
- Best practices for file management and dynamic modeling

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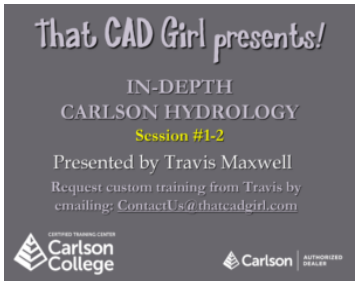
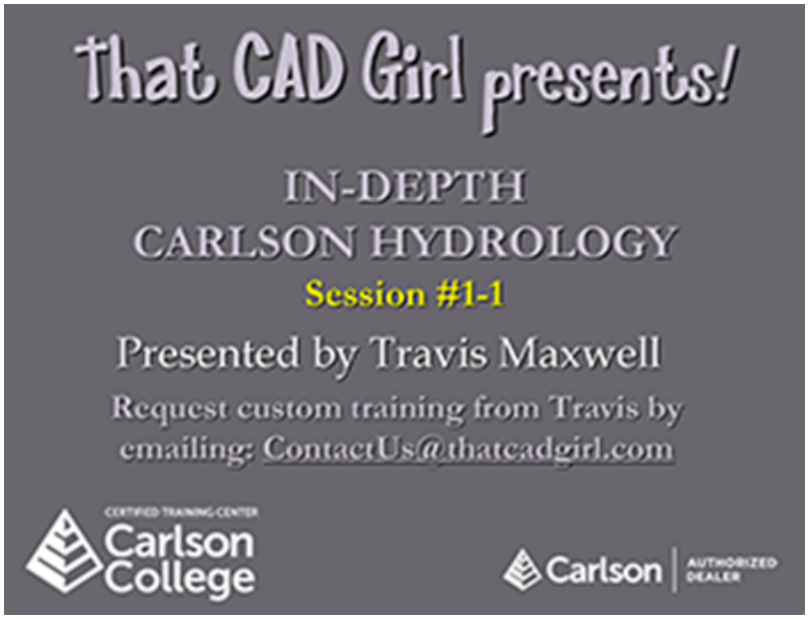
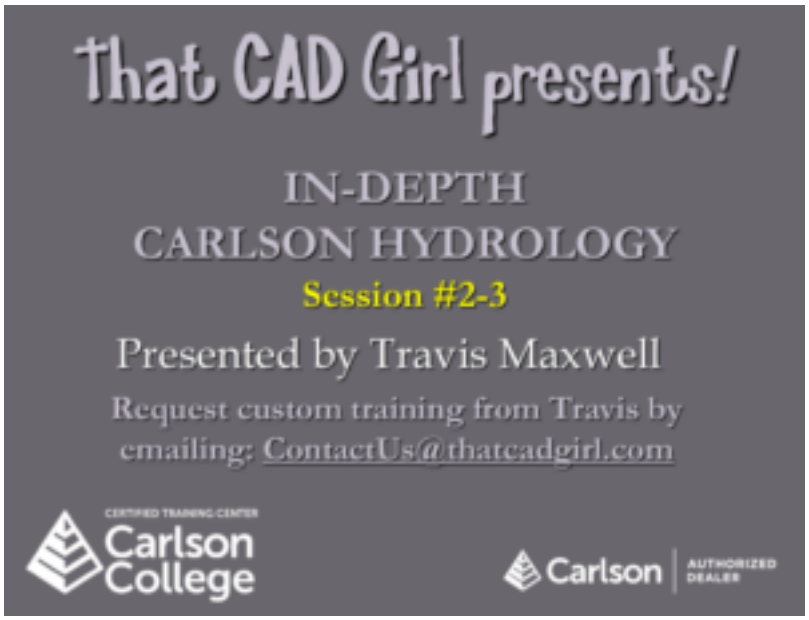
*These sessions were presented by Travis Maxwell.*Travis Maxwell introduces Carlson Hydrology setup, libraries, sewer networks and Rational and SCS methods.Travis Maxwell converts Civil 3D data, builds terrain and starts stormwater network design. Travis Maxwell models storm sewers, delineates watersheds and analyzes hydraulic grade lines and





spread.Travis Maxwell covers collection systems, utility crossings and HydroNet detention setup.Travis Maxwell designs detention ponds, stage-storage and outlet controls HydroNet.Travis Maxwell finishes with chambers, HydroCAD exchange and wet pond detailing.





What is new in Carlson 2022?

A Virtual Webinar Using Carlson Software – Learn What Is New in Carlson 2022

This webinar, hosted by That CAD Girl and presented by Travis Maxwell, explores new features and improvements in Carlson 2022 software. The session covers enhancements in IntelliCAD, dynamic blocks, text editing, grading tools, hydrology workflows and integration with GIS and utility design systems.

Key Topics:

- IntelliCAD 10.1 enhancements and dynamic block support
- New commands and text editing improvements
- Pad grading, lot elevation and site design automation
- Integration with SiteNet, RoadNet and HydroNet
- GIS and QGIS workflows for shapefile management
- Stormwater and utility design updates

Descriptions, transcripts and other details of this recording ha ve been AI-generated and may contain errors.

This session was presented by Travis Maxwell on 03/15/2022.

Tools & Tricks For Converting

Outside CAD Files

A Virtual Webinar Using Carlson Software – Learn to Convert Outside CAD Files

This webinar, hosted by That CAD Girl and presented by Travis Maxwell, provides a comprehensive walkthrough of best practices for converting and cleaning external CAD files for use in Carlson Software. It covers layer management, font and block cleanup, layer translation and troubleshooting performance issues in IntelliCAD versus AutoCAD.

Key Topics:

- Cleaning and optimizing external CAD files
- Managing layers, fonts and Xrefs
- Using layer translation tools and templates
- Handling blocks, line types and viewport colors
- Troubleshooting IntelliCAD performance issues

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This session was presented by Travis Maxwell on 04/13/2022.

2022 Virtual Workshops Session 1-1: Introduction to CAD

A Virtual Workshop Using Carlson Software – Learn CAD Fundamentals, Workspaces and Precision Drafting

The opening session of the 2022 Virtual Workshops introduced participants to IntelliCAD 2023 and Carlson 2023, focusing on CAD fundamentals, interface navigation and drafting precision. Jennifer DiBona guided attendees through command usage, settings, object snaps, polylines, text tools and practical workflow tips for survey and civil design professionals.

Key Topics:

- Overview of Carlson 2023 (IntelliCAD 10.1) release and stability improvements
- CAD interface elements: command line, toolbars, menus, ribbons, workspaces
- Default settings, command aliases and saving with backups
- Object snaps (OSNAP) and precision drafting
- Lines vs. polylines, grips and selection methods
- Text creation (single-line vs multi-line) and editing

Descriptions, transcripts and other details of this recording have been AI-generated and may contain errors.

This session was presented by Jennifer DiBona on 11/15/2022.

The Very Basics of Carlson Field to Finish

A Virtual Webinar Using Carlson Software – Learn Field to Finish Basics

This webinar introduces the fundamentals of Carlson's Field to Finish workflow, led by Doug Aaberg and hosted by That CAD Girl. It walks surveyors through setting up code tables, managing linework and automating drafting tasks to improve efficiency from field data collection to finished CAD drawings.

Key Topics:

- Introduction to Carlson Field to Finish setup
- Creating and editing code tables
- Managing linework, symbols and layers
- Using special codes and offsets
- Automating drafting and data processing

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This session was presented by Doug Aaberg on 03/10/2022.

Surfaces and Breaklines – the Basics

A Virtual Webinar Using Carlson Software – Learn to Build Surfaces with Breaklines and Shrink Wrap Boundaries

This webinar introduces the fundamentals of creating and refining surface models in Carlson Software, focusing on how to use points, breaklines and surface-editing tools to produce accurate terrain models. It covers best practices for data preparation, triangulation, contour generation and integrating external elevation data for design and visualization.

Key Topics:

- Preparing point and linework data for surface modeling
- Using Shrink Wrap Entities and Non-Surface point flags
- Building TIN surfaces and contours with Triangulate and Contour
- Creating and editing 3D breaklines
- Importing and merging external elevation data (NASA & Google)
- Visualization tools (3D Viewer, Flyover, Image Draping)

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This session was presented by Jennifer DiBona on 02/09/2022.

Overview of Carlson Point Cloud

A Virtual Webinar Using Carlson Point Cloud – Learn to Process Point Cloud Data

This webinar provides an in-depth overview of Carlson Point Cloud, demonstrating how to import, clean and process point cloud data for surveying and CAD integration. Presenter Doug Aaberg walks through workflows using drone imagery, Photo Capture and Carlson's Point Cloud Basic and Advanced modules.

Key Topics:

- Importing and managing point clouds in Carlson
- Cleaning and processing data (Bare Earth extraction, noise removal)
- Creating surfaces, points and CAD drawings from point clouds
- Using Photo Capture and GeoTIFF imagery
- Advanced tools for parking lot and color edge extraction

Descriptions, transcripts and other details of this recording ha ve been AI-generated and may contain errors.

This session was presented by Doug Aaberg on 04/28/2022.

Introduction to RoadNet in Carlson Software

A Virtual Webinar Using Carlson Software – Learn to Create Road Networks

This webinar introduces Carlson RoadNet, focusing on fundamental setup, workflow and troubleshooting for creating road networks in Carlson Civil. The session covers drawing centerlines, setting templates, managing intersections and cul-de-sacs and integrating lot grading for subdivision design.

Key Topics:

- Carlson RoadNet basics and setup
- Drawing and orienting centerlines
- Templates, profiles and intersections
- Cul-de-sac design and troubleshooting
- Lot and pad elevation automation

Descriptions, transcripts and other details of this recording have been AI-generated and may contain errors.

This session was presented by Travis Maxwell on 07/20/2022.

Introduction to LotNet in Carlson Software

A Virtual Webinar Using Carlson Software – Learn to Create LotNet Subdivision Layouts

This webinar introduces Carlson Software's LotNet module, demonstrating how to create, edit and manage subdivision layouts efficiently. Travis Maxwell walks through practical examples, showing how to set up boundaries, roads and lots and how to troubleshoot common issues.

Key Topics:

- Overview and setup of LotNet in Carlson Software
- Creating and editing subdivision layouts
- Integrating LotNet with RoadNet and SiteNet
- Troubleshooting and customization tips

Descriptions, transcripts and other details of this recording ha ve been AI-generated and may contain errors.

This session was presented by Travis Maxwell on 07/08/2022.