

# Site Grading Case Study for 36,000 SF Warehouse Recorded 5/23/2024

The webinar features Travis Maxwell discussing a warehouse project in North Carolina. He explains grading techniques, including site layout and design, and shares tools for grading like topography import and contour creation. Travis highlights the effectiveness of Civil This webinar features professional engineer Travis Maxwell demonstrating efficient grading techniques in Carlson Software for a 36,000 sq ft warehouse site. He walks through balancing cut/fill, using RoadNet and pad templates, and optimizing surfaces for storm-water design and machine control.

## Key Topics:

- Importing and simplifying Google-based topography
- Using pad templates to find site balance elevations
- Applying RoadNet for curved drives and parking areas
- Creating 3D polylines for split-level buildings and docks
- Comparing Carlson Software vs Civil 3D for complex terrain
- 3D for simple projects and contrasts it with Carlson for precision in complex terrains

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

*This session was presented by Travis Maxwell on 05/23/2024.*

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# Sanitary Sewer Pump Station Design in Carlson Software Recorded 4/10/2024

This webinar provides a detailed walkthrough of designing sanitary sewer pump stations using Carlson Hydrology and Structure tools. Presenter Travis demonstrates how to calculate system and pump curves, size wet wells, and integrate Excel-based calculations with Carlson's Lift Station Design command.

## Key Topics:

- Carlson Hydrology Lift Station Design tool
- Pump and system curve calculations
- Wet well sizing and float switch configuration
- Flow estimation for residential and commercial systems
- Common design pitfalls and troubleshooting

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*This session was presented by Travis Maxwell on 04/10/2024.*

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# Pond Design with Carlson Software

## Recorded 2/23/2024

This webinar, hosted by That CAD Girl and presented by Travis Maxwell, provides a detailed walkthrough of pond design using Carlson Software. It covers grading techniques, pond creation, linking to HydroNET models, and practical tips for efficient hydrology workflows.

### Key Topics:

- Pond grading and design using Carlson's Pond Grader and Bench Pond tools
- Linking pond storage files to HydroNET for stormwater modeling
- Troubleshooting grading errors and optimizing workflows
- Upcoming webinars and training opportunities

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*This session was presented by Travis Maxwell on 02/23/2024.*

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# Overview of Carlson Point Clouds

## Recorded 10/24/2024

This Carlson CAD Solutions webinar, led by Doug Oberg, provided a detailed overview of Carlson Point Clouds software, demonstrating how surveyors can use it to process, clean, and extract data from LiDAR and drone-based point clouds. The session covered both basic and advanced modules, including workflows for creating surfaces, extracting features, and integrating with CAD.

### Key Topics:

- Introduction to Carlson Point Clouds and workflow integration with CAD
- Importing and managing LiDAR and drone data
- Creating bare earth models and virtual surveys
- Feature extraction tools (curbs, sidewalks, parking lines)
- Field-to-finish and surface modeling techniques

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

*This session was presented by Doug Aaberg on 10/24/2024.*

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# 2024 Virtual Workshops – Session #4-4 Recorded 12/11/2024

This advanced Carlson Software virtual workshop, led by Mark Long, demonstrates integrated civil and hydrology design workflows using Carlson Hydrology, Sewer Network, and Precision 3D Hydro. Participants learn how to model surfaces, design storm and sanitary systems, and visualize drainage networks in 3D for more efficient, accurate engineering.

## Key Topics:

- Precision 3D Hydro and Dynamic CAD integration
- Storm drainage and sewer network design in Carlson Hydrology
- Surface modeling, watershed analysis, and runoff coefficients
- Pipe sizing, hydraulic grade line (HGL) setup, and profile generation
- Utility network creation (water, conduit, laterals)
- Future Carlson Software enhancements (2026 release preview)

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This session was presented by Mark Long on 12/11/2024.

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# Overview of Carlson Field to Finish

## Recorded 2/14/2024

This webinar provides a comprehensive walkthrough of Carlson Software's *Field to Finish* feature, demonstrating how to automate point processing, symbol insertion, and linework generation from field data. Attendees learn how to configure FLD files, manage layers, and apply coding standards to streamline survey drafting and surface modeling.

### Key Topics:

- Field to Finish fundamentals and FLD file setup
- Layer management and symbol configuration
- Point labeling, attribute layers, and raw vs. full descriptions
- Special codes for linework (BEG, END, PC, PT, etc.)
- Handling default codes, sizes, and descriptive modifiers

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*This session was presented by Jennifer DiBona on 02/14/2024.*

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**2024 Virtual Workshops –**

# Session #4-3

## Recorded 12/11/2024

In this advanced Carlson Software virtual workshop, Mark Long demonstrates time-saving techniques for civil and hydrology design using Carlson Civil and Hydrology modules. The session focuses on efficient subdivision layout, road network design, templates, super elevation, and grading transitions to enhance productivity and precision in engineering workflows.

### Key Topics:

- Lot Network and Subdivision Layout Tools
- Road Network (RoadNet) Design and Settings
- Template Creation and Management
- Super Elevation and Transition Design
- Grading, Slopes, and Stream Impact Minimization

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This session was presented by Mark Long on 12/11/2024.

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**2024 Virtual Workshops –  
Session #4-2**

# Recorded 12/11/2024

This virtual workshop continues the 2024 series on Carlson Software, focusing on surface modeling, pad grading, and 3D polyline workflows. Participants learn practical grading techniques, daylight line creation, and surface triangulation for real-world site design projects.

## Key Topics:

- Pad grading and daylight line creation
- 3D polyline utilities and elevation editing
- Building pad and curb grading workflows
- Surface triangulation, contour generation, and volume analysis
- Cut/fill color mapping and contour cleanup

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*This session was presented by Jennifer DiBona on 12/11/2024.*

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## 2024 Virtual Workshops – Session #4-1

# Recorded 12/11/2024

This session from *That CAD Girl's 2024 Virtual Workshop Series* introduces participants to surface modeling and grading workflows in Carlson Software. The training covers building existing ground surfaces, using breaklines, creating 3D polylines, merging su

rfaces, and integrating GIS imagery for visualization.

### **Key Topics:**

- Carlson Software surface modeling fundamentals
- Breaklines, boundaries, and triangulation (TIN) creation
- Field-to-Finish automation and 3D polyline generation
- Contour labeling, line-type generation, and cleanup
- Importing Google/NASA/USGS surfaces and merging TIN files
- Using GIS imagery and 3D flyovers for visualization

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

This session was presented by Jennifer DiBona on 12/11/2024.

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# **Introduction to Carlson Software – Settings, Setup, Configuration & Points Recording 2/1/2024**

This introductory Carlson Software webinar, hosted by That CAD Girl, walks new users through key setup and configuration steps for Carlson Survey and Civil modules. It covers interface customization, project folder organization, configuration management, and working with points and templates for consistent CAD standards.

### **Key Topics:**

- Carlson Software interface and configuration basics
- Project and data folder setup
- Managing builds, updates, and technical support
- Drawing templates and default settings
- Creating, importing, and editing points

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*This session was presented by Jennifer DiBona on 02/01/2024.*