

# 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

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

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

---

# 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

*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.*

---

# 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 surfaces, 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.

---

## 2024 Virtual Workshops – Session #3-4

# Recorded 12/10/2024

This session from *That CAD Girl's 2024 Virtual Workshop series* features Donnie's in-depth training on Carlson's Least Squares Adjustment tools for survey data analysis. The workshop covers interpreting reports, identifying blunders, understanding

statistical tests, and applying best practices for boundary and DOT survey adjustments.

**Key Topics:**

- Carlson Least Squares Adjustment fundamentals
- Error analysis and residual interpretation
- Chi-square testing and blunder detection
- ALTA/NSPS accuracy standards
- Practical examples: boundary and DOT survey data

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

This session was presented by Donnie Stallings on 12/10/2024.

---

## **2024 Virtual Workshops – Session #3-3, Recorded 12-10-2024**

This virtual Carlson Survey workshop, led by Donnie Stallings and hosted by That CAD Girl, introduced surveyors to the principles of least-squares adjustment and the use of Carlson Survey's SNET module. The session covered theory, workflow setup, and practical examples combining total-station and GPS data.

**Key Topics:**

- Introduction to least-squares adjustment theory
- History and development of Carlson Survey's SNET (Survey Net)

- Practical setup and configuration of SNET projects
- Combining total-station and GPS vectors
- Error analysis, blunder detection, and ALTA/NC DOT workflows

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

This session was presented by Donnie Stallings on 12/10/2024.

---

# **2024 Virtual Workshops – Session #3-2 Recorded 12/10/2024**

This advanced Carlson Software workshop, led by Doug Aaberg, explored powerful Field to Finish tools and workflows for surveyors, including annotation automation, tree and pipe features, and special coding techniques. The session offered practical demonstrations and Q&A to help users streamline drafting, labeling, and data collection processes.

## **Key Topics:**

- Carlson Field to Finish advanced features
- Annotation and MText automation
- Tree and pipe feature configuration
- Special codes, offsets, and templates
- Real-world Q&A on survey workflows

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

This session was presented by Doug Aaberg on 12/10/2024.

---

# 2024 Virtual Workshops – Session#3-1 Recorded 12/10/2024

This virtual training session, led by Carlson Software expert Doug Oberg, provided an in-depth walkthrough of the Field to Finish feature in Carlson Survey. Attendees learned how to automate drafting from field data, manage code tables, apply special codes, and streamline survey workflows from data collection to finished CAD drawings.

## Key Topics:

- Introduction to Carlson Field to Finish
- Creating and editing code tables
- Using special codes (begin, end, PC/PT, jog, rectangle, join point number)
- Managing layers, linework, and symbols
- Handling point groups and reprocessing efficiency
- Q&A on practical field coding and data management

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

This session was presented by Doug Aaberg on 12/10/2024.

---

# Fast Track to Carlson Takeoff – Session #2-3 Recorded 01/25/2024

This recorded training session covers advanced techniques in Carlson Takeoff, focusing on digitizing, scaling, and building accurate 3D surfaces from 2D plans. The instructor demonstrates practical workflows for importing PDFs, setting control points, creating layers, and elevating linework for construction takeoff and modeling.

## Key Topics:

- PDF import and scaling setup
- Layer management and control points
- Digitizing contours, curbs, and building pads
- Elevating 2D polylines to 3D
- Modeling surfaces and managing breaklines

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

*This session was presented by Jennifer DiBona on 1/23/2024.*

---

# Fast Track to Carlson Takeoff – Session #2-2 Recorded 01/25/2024

This training session provides an in-depth walkthrough of Carlson Takeoff's Trench and CADNet modules, demonstrating how to input trench networks, create templates, calculate quantities, and import or process PDFs for takeoff and modeling. The instructor also covers practical workflows for converting raster and vector data, merging images, and extracting linework from PDFs for construction modeling.

## Key Topics:

- Carlson Trench Module setup and workflow
- Creating trench templates and calculating trench quantities
- Understanding raster vs. vector PDFs
- Using CADNet to import, merge, and convert PDFs
- Extracting linework and spot elevations for modeling

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

*This session was presented by Jennifer DiBona on 1/25/2024.*

---

# Fast Track to Carlson Takeoff

# – Session #2-1

## Recorded 1/25/2024

This session is the second day of the FastTrack Carlson Takeoff training series led by That CAD Girl. It covers advanced CAD cleanup, elevation management, geotechnical data entry, and coordinate alignment workflows in Carlson Takeoff.

### Key Topics:

- Drawing cleanup and layer management
- Elevation correction and contour preparation
- Handling PDF imports and block cleanup
- Converting spot elevations to Carlson points
- Translating and aligning coordinates
- Introduction to Geotech and Trench modules

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

*This session was presented by Jennifer DiBona on 1/25/2024.*