

CADD NEWS

ISSUE
01

Volume 24

NCDIT Transportation Engineering Design & CADD Services Newsletter

January 2024

Training issue

Happy New Year, everyone, and welcome to the first edition of the CADD News for 2024. After last year's hiatus, the CADD News will return to regular releases this year.

The transition to the Open X products will continue to pick up steam over the next couple of years, so make a New Year's resolution to get on board and start learning how to use ORD and apply it to your specific job and discipline.

A lifetime ago (six or so years), the NCDOT decided to move from the traditional 2D plan sheet design world to a 3D model-based environment. As one might expect, we have encountered a few "bumps" in our journey to this "undiscovered county."

One of the "bumps" was - Training, or more precisely, what training is available and how do I get it? That is what this issue is all about



"There are years that ask questions and years that answer."

- Zora Neale Hurston

In This Issue

- NCLUG
- In-Person Training
- TEAMS Training
- Bentley Select Training
- Resources
- Last Words

Inquiring minds want know what is happening with CADD at NCDOT

NC DIT
TRANSPORTATION
cadd services

NCLUG Winter Conference

The North Carolina Local Users Group (NCLUG) is holding it's annual **Winter Conference February 20-21, 2024** at the Mckimmon Center on the campus of NC State University. To Register go to <https://www.nclug.com/event-5585976> for additional information visit the NCLUG web site at NCLUG.COM.

Day 1 - Feb 20			
	Room A	Room B	Room C
8:00 am - 8:25 am	Registration		
8:30 am - 9:00 am	Keynote Address: Bentley - Digital Delivery Mo Harmon		
9:00 am - 9:15 am	Break	Break	Break
9:15 am - 10:15 am	ORD Superelevation Module NCDOT Roadway	Introduction to MicroStation CONNECT Edition Bentley Workshop	UAS Waxhaw Project NCDOT Location & Survey
10:15 am - 11:15 am			Location & Surveys Tips/Tricks NCDOT Location & Survey
11:15 am - 11:30 am	Break	Break	Break
11:30 am - 12:30 pm	Roundtable: ORD		
12:30 pm - 1:30 pm	Networking Lunch		
1:30 pm - 2:30 pm	Practical Workflow - FS/ECTM NCDOT Surveying	MicroStation Update 2023.2 Bentley Lecture	Plans Production Q&A NCDOT Roadway
2:30 pm - 2:45 pm	Break	Break	Break
2:45 pm - 3:45 pm		Drawing with MicroStation for Civil Designers Bentley Lecture	Comparing MicroStation and ORD NCDOT CADD Services
3:45 pm - 4:00 pm	Break	Break	Break
4:00 pm - 5:00 pm	ECTM - Deeper Dive NCDOT Surveying	Creating Detail Sheets Bentley Lecture	Value Management Updates NCDOT Value Management

Day 2 - Feb. 21			
	Room A	Room B	Room C
8:00 am - 8:25 am	Registration		
8:30 am - 9:00 am	Keynote Address: Matthew Quesenberry - NCDOT Technical Services		
9:00 am - 9:15 am	Break	Break	Break
9:15 am - 10:15 am	ORD Roadway Plans Production NCDOT Roadway	QuickStart for MicroStation CONNECT Edition for Existing Users Bentley Workshop	NCDOT Project Wise NCDIT CADD Services
10:15 am - 11:15 am			Bridge Condition Inspection Patrick Gallagher, Consor Engineering
11:15 am - 11:30 am	Break	Break	Break
11:30 am - 12:30 pm	Roundtable: What is an ORD Project?		
12:30 pm - 1:30 pm	Networking Lunch		
1:30 pm - 2:30 pm	Detailed Modeling Workshop NCDOT Roadway	AccuDraw Basics Bentley Workshop	Hydraulic Unit Update NCDOT Hydraulic
2:30 pm - 2:45 pm	Break	Break	Break
2:45 pm - 3:45 pm			Exploring Best Practices for Utilities Amanda Jenkins, Surveying And Mapping
3:45 pm - 4:00 pm	Break	Break	Break
4:00 pm - 5:00 pm			Puyallup River Bridge Move Patrick Gallagher, Consor Engineering



Linn Cove Viaduct

In Person Training

NCDOT has two CADD Training labs available for CADD Training. One is the ET-Lab in Building B of the Century Center in Raleigh. The second is the Division 13 Computer Lab located in Marion at the District 3 maintenance building. The following in-person courses are currently scheduled.

ET LAB

Date	Course
March 20-21	ORD 101
March 26-28	MicroStation Connect I (ORD)
May 1-2	ORD 101

Marion Computer Lab

Date	Course
February 6-7	ORD 101
April 23-25	MicroStation Connect I (ORD)
May 22-23	ORD 101
June 18-20	MicroStation Connect I (ORD)

What classes does CADD Services Teach

Cadd Services is currently teaching two courses in person and online via teams.

MicroStation Connect I (ORD)

It is a three-day course covering the basics of using MicroStation within Open Roads Designer. This course is recommended for all users, whether an old hand or fresh out-of-school newbie, particularly if you don't use MicroStation regularly.

ORD 101

This two-day course covers the basics of using OpenRoads Designer (ORD). It is not an in-depth course but is intended to give the designer the basics to get started



How to sign up Training (NCDOT employees only)

To Sign up for these or any other course offered by EDCS, visit the State of NC Integrated HR-Payroll System website at:

[portal.osc.nc.gov/
app](http://portal.osc.nc.gov/app)

Log in with your NCID credentials and then select LMS & NCVIP from the top of the page to be taken to the Learning Management System (LMS), where you can sign up for these and other training courses.

Note: to sign up, you must have a valid NCID login and be a state employee

TEAMs Training

In addition to In-person training, Engineering Design & CADD Services (EDCS) also offers our current courses online via TEAMs. Our TEAMs class is the same as our In-Person ones delivered over the network. To take a class via teams, you should have at least two monitors, a microphone, and a camera for the best experience.

ORD 101 on TEAMs

Date	Course
February 13-14	ORD 101
March 3-4	ORD 101
June 5-6	ORD 101

MicroStation Connect I (ORD) on TEAMs

Date	Course
March 12-14	MicroStation Connect I (ORD)
May 5-7	MicroStation Connect I (ORD)



Current NCDOT CADD Software Versions

(as of 30 January 2024)

Product	Version
PowerGEOPAK SS4	08.11.09.878
PowerGEOPAK SS10	08.11.09.918
OpenRoads Designer	10.12.02.04
OpenBridge Designer	10.12.01.73
Open Rail Designer	10.12.01.59
ProjectWise Explorer Client	10.00.03.453
Connection Client	23.00.00.10
Interplot Client	08.11.11.56
Operating System - Windows 10 Professional	64 Bit
Productivity Suite – Microsoft Office 365	32-bit
AutoTurn	11.05.42
GuideSign Plus	24.8.20.148
Torus	6.03.4
Trimble Business Center	5.90.1
Bluebeam REVU x64 Extreme	20.2.70
GEOPAK SS2*	08.11.07.615
UpdateWS	19.12.19.1



The Bentley Learn Server

Additionally, Training can be found on the Bentley Learn Server (www.learn.bentley.com). The Training (though not NCDOT-specific) is available to anyone with access to the Bentley Learn website. Ethan Schwartz has set up a series of learning paths listed below.

MicroStation Connect Edition for Civil Designers

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=110039>

ORD Feature Videos

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=111508>

Best Practices

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=113285>

ORD CADD Administrator

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116675&callFrom=MyLp&aftkn=604bb9b5-6721-4414-afa2-47c08aa9b22a>

OpenRoads Designer full path

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116368&callFrom=MyLp>

ORD Survey

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=117918&callFrom=MyLp&aftkn=3383d752-dc42-4ffc-8e89-c8a6221f44d9>

ORD Roadway Design

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116368&callFrom=MyLp>

ORD Drainage Path

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116357&callFrom=home>

ProjectWise Explorer CONNECT Edition

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116611>

OpenRoads Designer Geotech Custom Learning Path

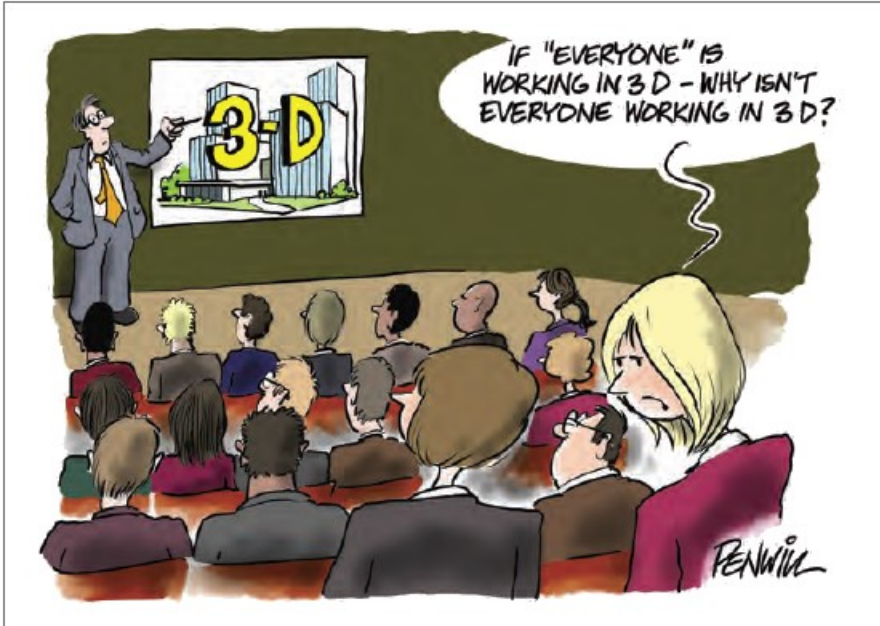
<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116739>

NCDOT Traffic Custom Learning Path

<https://learn.bentley.com/app/Public/ViewLearningPathDetails?lpld=116647&callFrom=MyLp&aftkn=24f59f1a-05ee-4f41-aa91-5f740f252101>

Last Words

Deep Thoughts



CADD Support

What is the quickest way to get help if you have a problem or a question about ProjectWise, MicroStation, ORD, OBD, or any other CADD/Engineering software?

Simple, email your question or issue to either:

CADD-sup@ncdot.gov

for questions about MicroStation, ORD, etc.

Dot.pwsupport@ncdot.gov

for all things ProjectWise related.

Contact Us

NCDIT - Transportation,
ETS ,EAS, Engineering De-
sign CADD Services

Web Address

[https://connect.ncdot.gov/
resources/CADD/Pages/
default.aspx](https://connect.ncdot.gov/resources/CADD/Pages/default.aspx)

Mailing Address

Century Center Complex Bldg.
A 1597 Mail Service Center
Raleigh, NC 27699-1597

"Some problems are so complex that you have to be highly intelligent and well informed just to be undecided about them." -
Laurence J

