

2017 NCLUG Summer Conference

Day 1 - July 25

Session	Title	Description
L11A	Setting Up OpenRoads Technology: Features	This presentation discusses how to set up horizontal and vertical geometry design standards and review superelevation standards.
L11B	Bring All of Your Teams Together (ProjectWise)	A new method for global worksharing and the benefits of application integration
L12A	Best Practice: From Civil Model to Plan Set	Discusses best practices for documenting the civil model with cross section sheets, earthwork quantities, and reports and how to save the model back to InRoads, GEOPAK, and MXROAD formats for use by traditional tools and workflows.
L12B	Deliverables Management (ProjectWise)	Are manual processes getting in the way? Are you struggling with deliverables today? How are you tracking them? It's time. Move off of spreadsheets.
L13A	Putting the Pieces Together: Creating Composite Models in OpenRoads	You have completed a complex model that contains multiple corridors, linear templates, surface templates, and 3D geometry. Your model includes all of the proper pavement layers and sub surfaces but what do you do next? Join us for a discussion of how to use this model and how to create a terrain model that includes all of the parts of the model.
L13B	IRD Remapper: Migrating NCDOT SS2 Projects to OpenRoads Designer	What would be the best way to manage this migration process? The objective is to at least make it appear as we were still in SS2 Roadway Designer, symbolgy wise, for reasons such as earthwork, printing, etc.
L14A	Setting Up OpenRoads Technology: Design Standards and Superelevation	This presentation discusses how to set up horizontal and vertical geometry design standards and review superelevation standards.
L14B	NCEM LiDAR Data: What it is and how to get it	This presentation gives an overview of the improvements in data quality, the progress of the statewide collection, and an explanation of the Risk Management Spatial Data Download portal as a way to access the new LiDAR elevation data.
L15A	Modeling Tips and Tricks	Join Bentley experts as they share tips and tricks for modeling elements and complex areas to create a complete model.
L15B	Stormwater Management Requirements for NCDOT Projects	This lecture presented by NCDOT will cover guidance, criteria, and requirements for the design and application of post-construction structural best management practices (BMP). As part of the program requirements of the permit, NCDOT must develop a BMP toolbox of stormwater treatment structures.

Day 1 - July 25

Session	Title	Description
RL16A	MicroStation - Ask the Instructor	Discuss various topics that are important to you in MicroStation (SELECTseries 1, 2, 3) with Panel of experts. Roundtable discussion will be very interactive. Attendees will continually engage with the panelist to ensure a successful learning outcome that includes a course assessment. Send NCLUG your questions in advance by email them to events@nclug.org .
W11A	Introduction to Microstation	The class is for MicroStation beginners to learn cadd techniques. If you need training for a new employee or feel you need a refresher course in any of our CADD products sign up for this workshop.
W11B	QuickStart for Roadway Modeling Using OpenRoads Technology	<p>This course is for both new users and users upgrading from previous versions of PowerCivil, Power GEOPAK, MX, and Power InRoads software to use the OpenRoads Technology. You will learn to model the roadway corridor using an existing 2 lane urban typical section with curb and gutter and sidewalk, control the pavement with geometry, and review the 3D corridor model. You will also model a T intersection complete with curb returns and side slopes using a civil cell. Finally, you will place pavement markings on the model. Before completing this course we recommend you complete the QuickStart for Terrain & Geometry Using OpenRoads course.</p> <p>It is recommended that SELECTseries 4 (08.11.09.845) or newer be used when taking this course.</p>
W12A	QuickStart Using ContextCapture	This course is an introduction to the OpenRoads ConceptStation software. In this course you will learn how to create conceptual models that include roads, bridges, and ramps, with lighting, guardrail and street markings. You will also learn how to create new projects, custom templates, and modify the conceptual design.
W12B	Introduction to MicroStation CONNECT Edition	This course will help a new MicroStation user become familiar with the MicroStation CONNECT Edition. This will be done from the point of view of a civil designer or drafter working at a design firm, is new to MicroStation, and has been awarded a design project that they will be involved with. During this course you will learn basic navigation of the MicroStation CONNECT user interface, creating and working with MicroStation design files, design file settings, and more.

2017 NCLUG Summer Conference

Day 2 - July 26

Session	Title	Description
L21A	Introducing The MicroStation CONNECT Edition	The MicroStation CONNECT Edition features many updates to the user interface. These updates include the introduction of a ribbon-style graphical user interface (GUI), a relocation of the “workspace” settings such as Preferences and Configuration, and more. This course contains a set of exercises that are used to become familiar with the ribbon style interface found in the MicroStation CONNECT Edition.
L21B	NCDOT Share Point (Beginner)	Come learn more about NCDOT new Share Point application and how it works. Learn what your role is as an end user, contributor, or designer. Note: for this lecture it is recommend you bring you own device and request an NC ID.
L22A	Creating WorkSpaces in MicroStation CONNECT Edition	In this course, Administrators will learn to create and edit the configuration file. The configuration file is a text file containing assignments and other processing instructions that are used to populate the look-up table.
L22B	NCDOT Share Point (Intermediate)	Already working with NCDOT Share Point, come learn more in-depth details about the program. Note: for this lecture it is recommend you bring you own device and request an NC ID.
L23A	Best Practice: Creating Civil Cells	Civil cells are a new and powerful capability of the OpenRoads Technology. This presentation shares best practices to help you create efficient and effective civil cells.
L24A	Big Data and Deliverables	Are manual processes getting in the way? Are you struggling with deliverables today? How are you tracking them? It's time. Move off of spreadsheets.
L25A	The Cloud and Hosting: Empower Business Transformations	Digital is a new way of engaging and an entirely new way of doing business. What does this mean for your business?
RL26A	Workflow / Standards	Join us for a discussion on design workflow and standards within our industry. A panel of leading experts will answer questions you have and be able to provide insight.
W21A	Getting Started with NCDOT OpenRoads Designer CONNECT Edition	This OpenRoads Designer CONNECT Edition course is a brief introduction to the new capabilities of the OpenRoads Designer software. This course provides a broad overview of a typical NCDOT workflow from start to finish and the new Plans Production Tools. It is also a good introduction to the new CONNECT Edition ribbon interface and ORD workflows.

Day 2 - July 26

Session	Title	Description
W21B	Editing Linear Features	Features are used to identify, name, and symbolize designs making them a vital component of the OpenRoads technology. This presentation discusses how features are defined in DGN Libraries, how they are related to Element Templates, and how they are linked to legacy settings in InRoads, GEOPAK, and MXROAD.
W22A	QuickStart using OpenRoads ConceptStation	This course is an introduction to the OpenRoads ConceptStation software. In this course you will learn how to create conceptual models that include roads, bridges, and ramps, with lighting, guardrail and street markings. You will also learn how to create new projects, custom templates, and modify the conceptual design.
W22B	Creating Terrain Models from Field Books & Survey Project Setting	This course teaches how to create Terrain Models from previously imported Survey data using an entire Field Book and also a Selection Set. This course teaches how to review and set important OpenRoads Survey Settings and how to convert a GEOPAK SMD file into the XML format used by OpenRoads Survey.
W23B	Importing and Editing ASCII Survey Data	This course teaches how to import, review, and edit data contained in RAW Survey data files using OpenRoads Survey. Such data includes Setups, Instrument Heights, Horizontal & Vertical Angles, Rod Heights, and Slope Distances.
W24B	Adjusting Survey Data & Export Survey Data	This course teaches how to use Survey Adjustment techniques available in OpenRoads Survey such as Least Square, Crandall, Compass, and Transit.
W25B	NCDOT Survey Update	A quick import of our class data sets using OpenRoads with all of NCDOT recently developed dgnlibs and element templates. NCDOT is approaching the delivery of these supporting files in their standard Workspaces. Review the beginnings of looking into 3D underground utility collection and look at a display on a new in-house program which checks the symbology for dgn files, called NC_Check.

2017 NCLUG Summer Conference

Day 3 - July 27

Session	Title	Description
L31A	Learn MicroStation Tips & Tricks, become more Productive with MicroStation	Learn how to increase your productivity, draw faster and smarter! In the course you will learn and get a chance to practice a variety of tools, settings and shortcuts to help you get better understanding of drawing creation, drawing setup, models, references, pdf, attributes, levels, cells and printing. Live training courses are very interactive. Students will continually engage with the instructor to ensure a successful learning outcome that includes a course assessment.
L31B	Work zone	Learn about improve safety and driving conditions in road construction areas, federal guidelines that federally funded highway construction projects must have an approved traffic control plan that requires a contractor to provide safety for highway construction workers.
L32A	Productivity Enhancements	MicroStation's new drawing production innovations speed design tasks and simplify workflows. Create 2D and 3D designs with ease with the comprehensive wide range of new and enhanced production drafting tools such as Copy Parallel, Move to Contact, and Trim to Element (just to name a few) found in MicroStation V8i (SELECTseries 3).
L32B	Roadway Update	Come hear about what's new in Roadway design unit at NCDOT.
L33A	Incorporate Geospatial Data into Any MicroStation Design	In this session learn how MicroStation V8i delivers geo-coordination capabilities fully supporting the integration of all types of data, regardless of coordinate system.
L33B	2018 Standards Update	New 2018 NCDOT Standards take effect with the January 2018 let and apply to both Centrally and Division managed projects. Come here about what's new and ask your questions to the expert.
L34A	Stand Out with Reality Modeling in Your Site Design (Siteopts)	Discover what differences between a reality model and reality modeling will mean to you. This lecture will look at how your firm can make clients happier, spend less time drafting, and benefit from reality modeling in SITEOPS .
L34B	Design Modeling vs Machine Control Modeling: What's the difference	Learn what difference is between Design Modeling vs Machine Control Modeling. Topics to include purpose of deliverables, output medium, level of detail, open discussion on the differences in data requirements for BID-BUILD verses DESIGN-BUILD and P3 Projects.

Day 3 - July 27

Session	Title	Description
L35A	You Droned Your Project, Now What?	Drone technology is improving rapidly, and it is becoming a common part of infrastructure workflows. But ordering and flying a drone to collect data, although cheaper and easier than previous methods, is still a costly expense, and it can be wasted if project teams don't know what to do with the data after they're collected. This lecture will detail how to import ContextCapture models into SITEOPS to create surface models of existing conditions that can be used quickly and efficiently before, during and after the project work.
L35B	Division Update	Come hear NCDOT Division 5, Division Engineer Joey Hopkin give an update on work his division has been doing.
RL36A	What Contractors would like: What's the real deliverable? - Roundtable Discussion	This open discuss roundtable will discuss what is the real deliverable contractors are wanting. Learn what is currently be done, how it is being used and what is the future deliverable. This also present a great opportunity to ask your questions to our expert panel.
W31A	The New NCDOT OpenRoads Designer CONNECT Edition Templates	This OpenRoads Designer CONNECT Edition course will go over the fundamentals of creating templates, the standard naming convention used, how the template libraries are organized, and how they are applied in corridor modeling. Hands-on training with exercises in a 175 page class manual are distributed for the workshop.
W31B	Analysis and Design - An Introduction (Hydro)	In this course, you will learn to Analyze a drainage project, design a project and be able to understand and control the difference.
W32B	Placing Inlets with Precision and Speed	In this course, you will learn how to place inlets with physical and hydraulic accuracy, speed and confidence. Of the 100+ attributes inlets require for physical and hydraulic accuracy, only a handful of selections are required to get an accurate inlet. This class helps you master those settings.
W33B	Lay Out and Compute a Simple Culvert	In this course, you will learn to lay out a simple culvert, attach flow and compute the results.
W34B	Trouble Shooting Geopak Drainage (SS2)	Come learn and ask your question on geopak drainage from experts. Send NCLUG your questions in advance by email them to events@nclug.org .