



2018 IDDEA Conference Announcement

Scheman Center, Iowa State University, Ames, Iowa
Workshops October 3rd & October 5th
Conference Day October 4th

With this newsletter, I am pleased to announce the agenda for the 2018 IDDEA Conference. This year's conference will be held on October 3rd through the 5th and will provide a great learning environment for every attendee. The IDDEA conference will showcase our users' practices, MicroStation, OpenRoads, and show everyone the future of design and analysis.

The IDDEA Board has worked hard to put together a conference full of sessions and workshops that highlight both the current and future MicroStation and Civil software that Bentley offers. We are bringing in presentations from the industry, Bentley professionals, as well as presentations from the Iowa Department of Transportation. We have sessions for beginners through advanced users to fulfill everyone's needs. Many of these sessions and workshops come to you directly from the 2018 Bentley LEARNING Conferences to be held this year.

Our keynote, "**The Future of Engineering Technology**" presented by Dustin Parkman, from Bentley will share with you insights into the future of engineering and how Bentley's portfolio of software and services are embracing this new direction.

Once again this year the board is hosting a social event and prize giveaway on Thursday, Oct 4th, following the conference. The intent is to provide an opportunity to meet with peers as well as the presenters and sponsors. Hors d'oeuvres will be provided and a cash bar will be available for refreshments. All conference participants are invited to attend the social event following the closing remarks.

To register for the conference, you can make use of our on-line registration service. Sign up right away, as workshop attendance is based on a first come, first serve basis. The site is located at our web address: www.iddea.org. At this

site you can download the conference newsletter, register for the conference, find information about the IDDEA Group, and download electronic copies of presentations that we have received from presenters. Please register on our site if you have not already.

As always, we put this conference together for you, our membership. Let a board member know if you have any suggestions for future sessions or workshops that you would like to see. Please let us know any ideas or if you are interested in giving a presentation.

We look forward to seeing you at the 2018 IDDEA Conference on October 3rd through the 5th at the Scheman Center on the Iowa State University Campus in Ames.

Hope to see you there!!

William J. Behrendt
Chair, The IDDEA Group

Registration Information

To register for the IDDEA Conference visit: WWW.IDDEA.ORG

Note: We hope you will become a member before registering for the conference, but it is not required.

A variety of payment options are available during the registration process. A confirmation email will be sent when payment is received.

Payment must be **received no later than Friday, September 28, 2018**. The deadline to cancel and receive a refund is also **Friday, September 28, 2018**.

Make checks payable to: The IDDEA Group

Send to: Iowa DOT
Office of Bridges and Structures
c/o Annette Jeffers
800 Lincoln Way
Ames, Iowa 50010

A copy of the registration form will serve as an invoice for most purposes.

½ day workshop - \$75

Full day Workshop - \$150

Conference day - \$70

Students – (Conference day only) - \$30

[Register On-Line Here](#)

Conference Location & Hotel Accommodations

IOWA STATE UNIVERSITY

Google - [Directions to Iowa State University](#)

Iowa State University – [Online Campus Map](#)

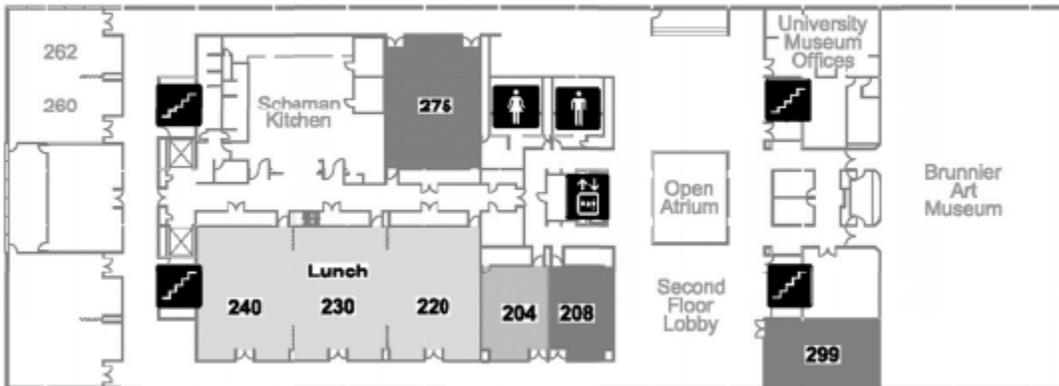
Hotel Accommodations – [Ames Convention and Visitors Bureau](#)

Dining – [Ames Convention and Visitors Bureau](#)

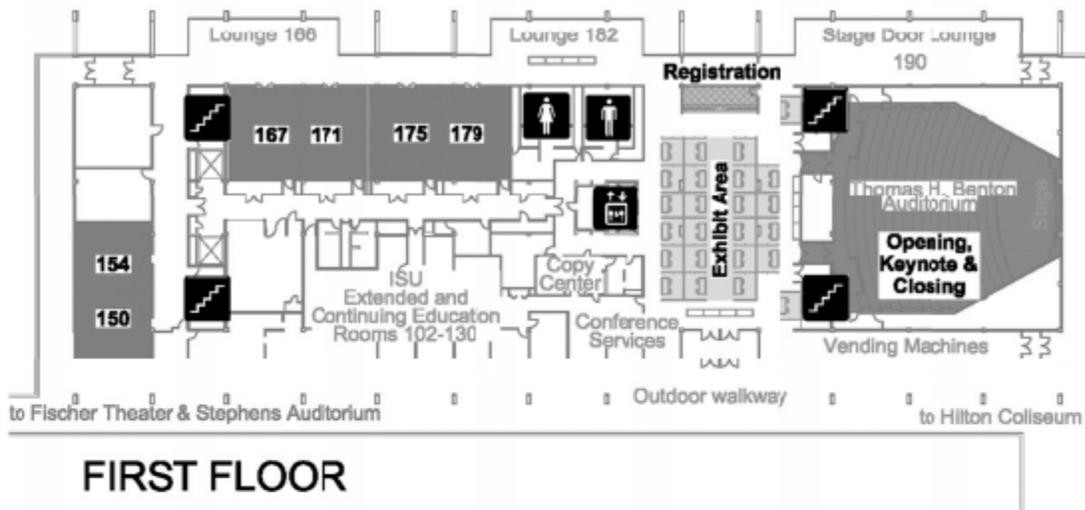


IOWA STATE CENTER - IOWA STATE UNIVERSITY

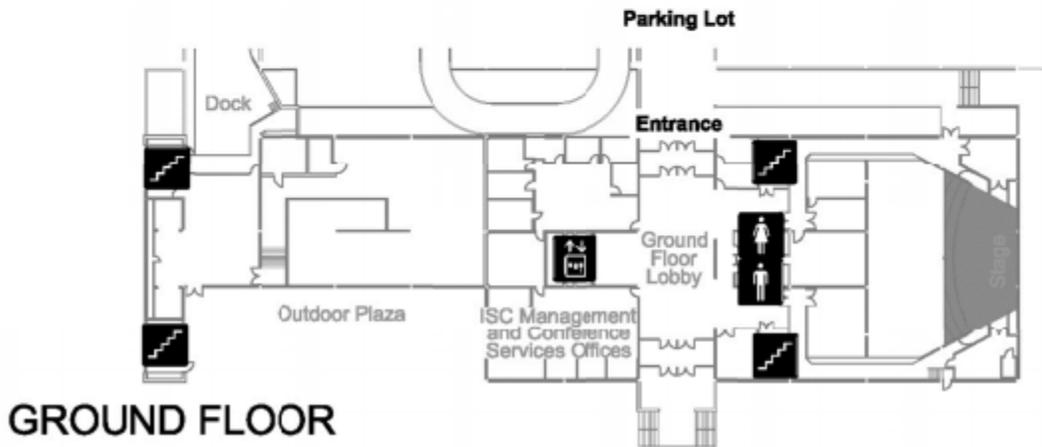
Scheman Building



SECOND FLOOR



FIRST FLOOR



GROUND FLOOR

Keynote

Dustin Parkman, Bentley Systems, Inc.

Dustin Parkman is the Vice President of Civil Infrastructure at Bentley Systems. He has held several senior product and business development positions throughout his career related to creating exceptional products and solutions servicing the infrastructure industry. Dustin has degrees in computer science and economics; he has spent his entire career dedicated to creating technology that allows engineers, contractors and owners to automate the construction and operation of infrastructure. Dustin currently lives in the New Orleans area with his wife and three children.

Workshop Presenters

Bob Rolle, Bentley Systems, Inc. bob.rolle@bentley.com

Bob is a registered professional engineer in the state of Kansas. Bob worked for several years for the Kansas Department of Transportation as a project engineer. In 1992 Bob began working for a consultant firm as a Project Design Engineer and later was assigned the Design Support Systems Engineer position focusing on providing Civil and Architectural resources, support, and training for the corporation. He is now a member of the Bentley team as a Civil Application Engineer for the Transportation & Local Infrastructure group.

Patrice Rhodes, P. H. Rhodes, Inc. Patrice@PHRhodesInc.com

Patrice Rhodes of P.H. Rhodes, Inc. is an independent consultant specializing in CAD management consulting, on-site customized software training, and individualized ongoing support services. Patrice has provided CAD management services and extensive MicroStation training for clients in a variety of disciplines with a strong focus on incorporating client data and procedures into her training programs. Patrice has also designed custom training programs in areas related to document management, engineering safety procedures, and insurance industry software. She also conducts seminars on training and course development for her clients. Through her membership in Mensa and Intertel, Patrice has been selected to serve on special project consulting teams for numerous corporate clients over the last decade. Patrice has been creating and implementing successful training, support and CAD management programs for **thirty years**, and has enjoyed twenty four successful years since founding P.H. Rhodes, Inc. in 1994.

Steve Rick, Bentley Systems, Inc. steve.rick@bentley.com

With over 30 years' experience in engineering technology, Steve provides technical support for all Bentley platform software, project management tools and server products. He is proficient at generating custom tools and workspaces. As a Bentley certified instructor, develops and delivers client-specific Bentley training. Has performed a wide variety of MicroStation-related training as a certified instructor since 1994, to such clients as Minnesota DOT, South Dakota DOT, North Dakota DOT, Iowa DOT, Nebraska Department of Roads, USACE, US Army as well as many others. Standard MicroStation-related training he has performed includes Bentley's Essential MicroStation, Moving to MicroStation, Productive MicroStation, Managing MicroStation, Administering MicroStation, Everything 3D, MicroStation Animation and Rendering, Bentley Map, Map Administrator and some Projectwise Knowledge as well. He has also developed custom courseware for some of these agencies.

Workshop Presenters Continued

Timothy Wright, Bentley Systems, Inc.

Timothy.Wright@bentley.com

For the past 28 years Tim has worked in the CADD field. First for private contractors then nearly 20 years at the Illinois Dept of Transportation where he supported District operations statewide, ran the training program and worked closely with the surveyors. Now working with the Training Materials production group at Bentley he works with the team to produce training courses, videos and hosting webinars.

Tim also founded the Illinois Bentley User group, was instrumental in its growth and also occasionally moonlights at a local community college teaching MicroStation.

Steve Willoughby, Bentley Systems, Inc.

steve.willoughby@bentley.com

Steve started his career working for Illinois DOT. He began working for GEOPAK Corp. in 1995. He has worked in the Bridge Information Modeling Group since its inception providing consulting, training, and support services. He has nearly 30 years of experience in using, implementing, training, and supporting civil engineering design software. He has worked with over two dozen DOT's and countless engineering firms in his time with Bentley Systems.

Jeanne Aarhus, Aarhus Associates jeanne@aarhusassociates.com

Jeanne has been working with various CAD systems and applications since the early 1980s. She has gained experience in many CAD related fields that have included production drawings, coordination, end-user support, programming, and training. Her specialty is in providing users with the necessary tools to increase productivity and get the job done as efficiently as possible using these constantly changing tools. She is certified in all levels of MicroStation and AutoCAD and has over 20 years of experience using MicroStation and AutoCAD in the Mapping and AEC environments. She has conducted seminars and workshops on CAD productivity for managers and users in both corporate and college settings. Jeanne has provided training workshops and has been actively involved in international, national, and local CAD user groups, and is known for her "real-world" approach to learning.

Dan Calistrat, DTM Solutions

dan@dtm-solutions.com

Dan Calistrat is a licensed professional engineer in 6 states and has been actively practicing for the past 23 years. After engineering for the land development community, Dan joined GEOPAK where he was instrumental in the development, certification, and training of Bentley civil products. After nearly a decade at GEOPAK, Dan left to implement Bentley software on some of the largest construction projects in the United States. Dan founded DTM Solutions where he consults with all size firms to make their transition and integration to civil engineering software as seamless as possible. His vision for the firm is based on providing billable solutions to clients in need of civil engineering software training. Dan holds a B.S. degree in Civil Engineering from Texas A&M University and is an active member of the American Society of Civil Engineers.

Conference Presenters

Sonya Pieterse, Bentley Systems, Inc.	Sonya.Pieterse@bentley.com
Bob Rolle, Bentley Systems, Inc.	Bob.Rolle@bentley.com
Jeff Vaske, Midwest CAD Solutions	jeffv@mcscad.com
Steve Willoughby, Bentley Systems, Inc.	Steve.Willoughby@bentley.com
Patrice Rhodes, P. H. Rhodes, Inc.	Patrice@PHRhodesInc.com
Jeanne Aarhus, Aarhus Associates	jeanne@aarhusassociates.com
Steve Rick, Bentley Systems, Inc.	Steve.Rick@bentley.com
Timothy Wright, Bentley Systems, Inc.	Timothy.Wright@bentley.com
Scott Almeida, Kirkham, Michael & Associates	salmeida@kirkham.com
Kevin Snook, The Schemmer Associates	ksnook@schemmer.com
Jared Rokke, Foth Infrastructure & Environment	Jared.Rokke@Foth.com
Jack Riesenber, Foth Infrastructure & Environment	jack.riesenberg@foth.com
Matt Smith, Foth Infrastructure & Environment	Matt.Smith@Foth.com
Eric Diedrich, Iowa DOT	Eric.Diedrich@iowadot.us
Brett Kloss, Iowa DOT	Brett.Kloss@iowadot.us
Paul Knievel, HDR Inc.	paul.knievel@hdrinc.com
Matthew Cushman, Terracon	mdcushman@terracon.com
Dan Calistrat, DTM Solutions	dan@dtm-solutions.com
Bryan Dannen, HR Green	bdannen@hrgreen.com
Ahmad Abu-Hawash, Iowa DOT	Ahmad.Abu-Hawash@iowadot.us
Grant Schmitz, HDR Inc.	Grant.Schmitz@hdrinc.com
Jason Dove, SE3, LLC	jdove@se3.us

7:30 - 8:00	Registration and Continental Breakfast		
Room No.	150-154	167-171	175-179
8:00 - 12:00	Intersection Modeling: Adding Elevation (3D) to 2D Geometry, & Defining 2D Geometry	MicroStation V8i SS4 Beginning Workshop	Introduction to MicroStation CONNECT Edition & Generating Roadway Annotation: Plan and Section Labeling MicroStation CONNECT Edition
	<i>Bob Rolle</i>	<i>Patrice Rhodes</i>	<i>Steve Rick</i>
12:00 - 1:00	Lunch (Stage Door Lounge 190) Afternoon Registration		
1:00 - 5:00	Creating and Manipulating the Corridor & Corridor Modeling Quantities	MicroStation V8i SS4 Intermediate Workshop	Importing DWG files in the MicroStation Connect Edition & Reality Modeling- Integrating Acute 3D Models into your Workflow
	<i>Timothy Wright</i>	<i>Patrice Rhodes</i>	<i>Steve Rick</i>

Intersection Modeling: Adding Elevation (3D) to 2D Geometry, & Defining 2D Geometry

Presenter – Bob Rolle, Bentley Systems, Inc.

This first part of this workshop is for users with some prior experience using OpenRoads Technology. In this course, we are re-designing one leg of an existing at-grade intersection to accommodate the extensive widening and re-design of the existing roadway. This course teaches tools and techniques that can be used to vertically define an at grade intersection. It will focus on creating the vertical definitions for horizontal elements using OpenRoads methods.

The second part of this workshop is for users with some prior experience using OpenRoads Technology. In this course, we are re-designing one leg of an existing at-grade intersection to accommodate the extensive widening and re-design of the existing roadway. This course teaches tools and techniques that can be used to lay out an at grade intersection. It will focus on the Horizontal Geometry tools in OpenRoads.

MicroStation V8i SS4 Beginning Workshop

Presenter – Patrice Rhodes, P. H. Rhodes, Inc.

This half-day workshop is designed for BRAND NEW USERS of MicroStation, and will show you some of the most basic features and capabilities of MicroStation. Topics include basic element placement, setting element attributes, editing existing elements, displaying and viewing your design files, placing text and symbols, and getting help. By attending this workshop, you will get the look and feel of MicroStation, while having the opportunity to follow along and try various tools and settings. This is the perfect chance for new users to “get their feet wet”.

Introduction to MicroStation CONNECT Edition & Generating Roadway Annotation: Plan and Section Labeling MicroStation CONNECT Edition

Presenter – Steve Rick, Bentley Systems, Inc.

This first part of this workshop 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.

The second part of this workshop contains exercises that utilize methods to embellish a set of roadway plans to communicate pertinent information and design intent. Annotation helps design features such as text, dimensions, labels, patterns and hatching stand out.

Creating and Manipulating the Corridor & Corridor Modeling Quantities

Presenter – Tim Wright, Bentley Systems, Inc.

In the first part of this workshop, you will create a roadway corridor and then explore the many tools and techniques to edit and manipulate the corridor. We will take a look at how to add multiple template drops along the corridor as you encounter intersections, driveways and turn lanes and how to edit and copy template drops in lieu of creating a new template. We will show how to make the corridor follow edge of pavement geometry using point controls and corridor references. You will learn how the secondary alignment tool aids in changing the direction of template processing as it applies to point controls and corridor reference elements. You will also learn how to use parametric constraints to override default template values for pavement depths, curb heights, shoulder slopes and ditch widths and how to use the clipping reference tool to clip out a portion of your corridor. We will take a look at how corridors interact with other corridors by learning how to use target aliasing to seek corridors. And finally we will show how to create end condition exceptions in areas that require a different type of end condition solution.

In the second part of this workshop, you will learn various tools and methods to extract and compute quantities from the corridor model. You will learn how to assign unit costs and generate an estimated cost report for your project using the Component Quantities and Element Component Quantities tool. We will take a look at how to generate cut and fill volume reports from single corridor models as well as multiple corridor models and you will also learn how Named Boundaries and the Quantities Report by Named Boundary can be used to segregate quantities in the corridor model.

MicroStation V8i SS4 Intermediate Workshop

Presenter – Patrice Rhodes, P. H. Rhodes, Inc.

This half-day workshop continues from where the MicroStation V8i SS4 Beginning workshop leaves off. This workshop is designed for NEW USERS of MicroStation to see some additional features in the software, including element selection, locks, patterning, references, dimensions and precision input. By attending this workshop, you will get a little more in-depth look at the capabilities of MicroStation, while having the opportunity to follow along and try various tools and settings. This workshop will help new users get a clearer picture of what they can do in MicroStation.

Importing DWG files in the MicroStation Connect Edition & Reality Modeling- Integrating Acute 3D Models into your Workflow

Presenter – Steve Rick, Bentley Systems, Inc.

When working on infrastructure projects it is not uncommon to encounter data delivered in a variety of formats. These “data formats” can range from CAD files such as AutoCAD DWG to office documents obtained from word processor and spreadsheet applications. To aid in data interoperability and the reuse of design geometry, MicroStation provides the ability to interact with DWG files through referencing, direct editing and file format conversion from AutoCAD to MicroStation. When conversion is desired, this can be achieved by importing data from a DWG file directly into the active MicroStation design file or by performing a Save As from an AutoCAD DWG file into a MicroStation DGN file format. This course contains a set of exercises to learn how to convert the data contained in DWG files into MicroStation, allowing this data to be utilized natively in MicroStation while helping to maintain the best possible fidelity of that data. This course contains exercises for you to learn all about Acute 3D, .3mx files and more importantly, how to include them in MicroStation based workflows. Master attaching .3mx as local reference files, learn to attach them geographically as well as by key-in. Navigate around the 3D models using various view tools. Master reference tools such as Clip Boundary and Mask. Integrate Acute 3D Models with Google Earth and print Acute 3D Scene files to a 3D PDF. Printing to a 3D PDF is a great way to communicate your existing and proposed design. You will learn to control how Acute 3D file accuracy is defined when exported, dropped or printed from MicroStation. As an optional exercise, you will learn to attach a Bing Map to our design geometry and Acute 3D Model.

7:15-8:00	Conference Registration and Continental Breakfast						
8:00-9:00	Opening Remarks and Keynote: Digital Engineering from Concept through Construction (MicroStation Site) (Auditorium)						
9:00 - 9:10	BREAK (Vendor Area)						
Room No.	175-179	167-171	150-154	204	208	275	299
	1	2	3	4	5	6	7
9:10-10:00	4D Modeling for Roads with Bentley Schedule Simulation <i>Sonya Pieterse</i>	Conceptualize & Communicate Your Road Design with OpenRoads ConceptStation <i>Bob Rolle</i>	More Useful MicroStation V8i Configuration Variables <i>Patrice Rhodes</i>	Configure OpenBridge Modeler <i>Steve Willoughby</i>	SS4: Named Expressions <i>Jeff Vaske</i>	Real-World DWG Interoperability <i>Jeanne Aarhus</i>	Introduction to MicroStation CONNECT Edition <i>Steve Rick</i>
10:00-10:10	BREAK (Vendor Area)						
	8	9	10	11	12	13	14
10:10-11:00	Modeling Techniques - Ramps and Gores <i>Timothy Wright</i>	OpenRoads Best Practice - Making the Model More Visual <i>Bob Rolle</i>	Updating the Design - What Happens When Things Change? <i>Sonya Pieterse</i>	ProConcrete Workflow with OpenBridge Modeler <i>Steve Willoughby</i>	Des Moines SE Connector Update <i>Scott Almeida</i>	OpenRoads Lessons Learned <i>Kevin Snook</i>	Creating WorkSpaces in MicroStation CONNECT Edition <i>Steve Rick</i>
11:00-11:10	BREAK (Vendor Area)						
	15	16	17	18	19	20	21
11:10-12:00	ORD: Horizontal Geometry Annotation <i>Jeff Vaske</i>	OpenRoads Designer Volumetrics and Quantities <i>Timothy Wright</i>	Hubbell Ave Corridor Safety Improvements <i>Foth</i>	Open Roads- Out of the Sandbox <i>Bryan Dannen</i>	OpenRoads Graphical filters for AMG <i>Kevin Snook</i>	Customizing MicroStation CONNECT <i>Jeanne Aarhus</i>	GEOPAK Drainage <i>Dan Calistrat</i>
12:00-1:00	Lunch						
	22	23	24	25	26	27	28
1:00-1:50	Modeling Techniques - Roundabouts <i>Timothy Wright</i>	Site Modeling in OpenRoads Designer <i>Sonya Pieterse</i>	I-74 Bridge Replacement Project Overview <i>Ahmad Abu-Hawash</i>	Iowa DOT SUE efforts with OpenRoads <i>IA DOT</i>	I-29 Sioux City EPS <i>Paul Knievel/ Matthew Cushman</i>	All-New MicroStation V8i Top Ten Support Questions <i>Patrice Rhodes</i>	Visualization for Everyone <i>Bob Rolle</i>
1:50-2:00	BREAK (Vendor Area)						
	29	30	31	32	33	34	35
2:00-2:50	Site Modeling <i>Dan Calistrat</i>	Why you Should be Using Subsurface Utilities & How to Get There <i>Sonya Pieterse</i>	Iowa DOT BIM Pilot Project <i>Grant Schmitz</i>	Ask the Experts <i>Timothy Wright/Bob Rolle</i>	Configuring Your ProjectWise Project <i>Jason Dove</i>	CONNECT focused Tips and Tricks <i>Jeanne Aarhus</i>	Training Tips Discussion <i>Patrice Rhodes</i>
3:00-5:00	Closing Remarks & Membership Business (Auditorium) Door Prizes and Social (Vendor Area)						
*** Vendors will be exhibiting in the Lobby from 7:30 am to 5:00 pm ***							
Session Emphasis	MicroStation SS4	Civil Products	GIS/Survey	Bridge	General		

8:00 – 9:00

Keynote – The Future of Engineering Technology

Presenter – Dustin Parkman, Bentley Systems, Inc.

Being successful in today's world requires many things, including: a deep understanding of industry trends, an expertise in project requirements, and foresight into what the future may hold. These three items will help you choose the path that aligns best with your business needs. During this keynote, Dustin will share with you insights into the future of engineering technology and how Bentley's portfolio of software and services are embracing this new direction.

9:10 – 10:00

1 – 4D Modeling for Roads with Bentley Schedule Simulation

Presenter – Sonya Pieterse, Bentley Systems, Inc.

The Bentley Schedule Simulation tool enables you to visualize a schedule by integrating 2D or 3D engineering data with a project schedule. It is designed to help in the planning, design or construction stages of a project so that you can get a visual representation of the required tasks and prevent spatial conflicts. For the engineer or contractor it can aid in determining constructability and sequencing of a project. This session will focus on how we can take an OpenRoads Designer 3D model plus a construction schedule and create a 4D model to show construction sequencing/phasing.

2 - Conceptualize and Communicate Your Road Design with OpenRoads ConceptStation

Presenter – Bob Rolle, Bentley Systems, Inc.

OpenRoads ConceptStation helps you jump-start your projects by rapidly creating conceptual models that allow you to evaluate design alternatives and estimated costs faster, resulting in improved project decisions. Use OpenRoads ConceptStation's powerful modeling capabilities to model roads, rail, intersections,

bridges, tunnels and more. Continuously updated estimated project costs make it easy to evaluate design alternatives and options. The conceptual models are easily shared with the public and stakeholders using the built in realistic visualizations capabilities.

3 – More Useful MicroStation V8i Configuration Variables

Presenter – Patrice Rhodes, P. H. Rhodes, Inc.

Configuration variables are at the heart of MicroStation's functionality. This session covers another collection of useful and interesting configuration variables that just might improve your workflow and productivity while increasing your options in controlling this software.

4 - Configure OpenBridge Modeler

Presenter – Steve Willoughby, Bentley Systems, Inc.

Open Bridge Modeler provides libraries and configuration variables that can be user modified. This session explains what each variable does as well as how to modify the libraries.

9:10 – 10:00 CONTINUED**5 – SS4: Named Expressions**

Presenter – Jeff Vaske, Midwest CAD Solutions

A specific look at how Named Expressions may be utilized to enhance MicroStation tools and element templates. The focus will be on custom tools to 'build' levels for designated tool sets.

6 - Real-World DWG Interoperability

Presenter – Jeanne Aarhus, Aarhus Associates

Using DWG is easier than ever before, but understanding the DWG format may still be a mystery to many of you. Just being able to open and reference a DWG may not be enough for complete interoperability; you also need to know how to manipulate the data to fully use it in your projects. This session will answer many of those mysterious DWG anomalies that arise every day during a project. Learn what to use and what to avoid in a "multi-CAD" environment and improve your understanding of DWG.

7 - Introduction to MicroStation CONNECT Edition

Presenter – Steve Rick, Bentley Systems, Inc.

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.

10:10 – 11:00**8 - Modeling Techniques - Ramps and Gores**

Presenter – Timothy Wright, Bentley Systems, Inc.

Join Bentley experts to learn recommended techniques to model ramps and gores as part of your mainline roadway corridors.

9 – OpenRoads Best Practice - Making the Model More Visual

Presenter – Bob Rolle, Bentley Systems, Inc.,

Learn how to increase the visual impact of your models with minimal effort. Create models using realistic materials, pavement markings, guardrail, barriers, fences, traffic control and more. The techniques described in this session all use functionality built into the OpenRoads Designer workspace.

10 - Updating the Design - What Happens When Things Change?

Presenter – Sonya Pieterse, Bentley Systems, Inc.

This session will focus on what happens to OpenRoads data as changes are made throughout the design process. We will start with a completed preliminary design model and then discuss what happens when changes are made to terrain, geometry, templates and corridors. This session will give you a better understanding of how things update based on the rules and relationships that are part of OpenRoads technology.

10:10 – 11:00 CONTINUED**11 – ProConcrete Workflow with OpenBridge Modeler**

Presenter – Steve Willoughby, Bentley Systems, Inc.

This lecture shows how ProStructures interacts with OpenBridge Modeler for rebar detailing and quantity calculations.

12 – Des Moines SE Connector Update

Presenter – Scott Almeida, Kirkham, Michael & Associates

An update on the \$180 Million dollar SE Connector project between the downtown Des Moines and Highway 65. A review of previous phases, construction in-progress, and a preview of the final segment will be presented.

13 – OpenRoads Lessons Learned

Presenter – Kevin Snook, The Schemmer Associates

This presentation will center on some of the useful lessons, tips, and tricks I've learned while using OpenRoads over the past several years.

14 – Creating WorkSpaces in MicroStation CONNECT Edition

Presenter – Steve Rick, Bentley Systems, Inc.

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.

11:10 – 12:00**15 – ORD: linear plan element annotation**

Presenter – Jeff Vaske, Midwest CAD Solutions.

A look at how labeling 2D geometry functions with Open Roads Designer and how it may affect your approach to design. Focus will be on Horizontal Geometry labeling.

16 – OpenRoads Designer Volumetrics and Quantities

Presenter – Timothy Wright, Bentley Systems, Inc.

OpenRoads Designer has several techniques to compute volumes and component quantities from a model. During this session we will show how to compute component quantities and volumes. These can be computed and reported for the entire project or broken down into reporting boundaries that meet specific project needs. The reporting boundaries are flexible and can follow staged construction areas, sides of the road, station ranges (like traditional end area volumes) and more.

17 – Hubbell Ave Corridor Safety Improvements

Presenters – Jared Rokke, Jack Riesenber, Matt Smith, Foth

Do you have an OpenRoads 3D model and want to make it come to life? What are some steps to get there and what software could be used to make this easily happen? The project team from Foth will discuss the project and how it went from an OpenRoads 3D model to a LumenRT live cube.

18 – Open Roads- Out of the Sandbox

Presenter, Bryan Dannen, HR Green

This presentation will cover potential challenges encountered while developing projects in the real world, as well as practical solutions. Also included will be tips, tricks, and tools to make the modeling process run smoother, streamline the design, and plan for future modifications.

11:10 – 12:00 CONTINUED**19 - OpenRoads Graphical filters for AMG**

Presenter – Kevin Snook, The Schemmer Associates

With the growing push to use 3D models as part of the construction workflow, this presentation will center on the use of OpenRoads Terrain Graphical filters to create a suitable terrain for use during (AMG) Automated Machine Grading.

20 - Customizing MicroStation CONNECT

Presenter – Jeanne Aarhus, Aarhus Associates.

This session takes an in-depth look at customizing MicroStation CONNECT Edition. In this session you will learn to create custom tool boxes, frames, and menu bars; in addition to implementing and utilizing the basics of Named Expressions to increase standardization and productivity immediately. If you have trouble

maintaining standards or you just want to improve MicroStation to work “your way”, this session is designed for you!

21 - GEOPAK Drainage

Presenter – Dan Calistrat, DTM Solutions

Whether you’re new to GEOPAK Drainage or just need a review, this presentation of capabilities, workflows and 3D drainage modeling is for you! We’ll showcase all of the tools and their proper usage so you can efficiently use Drainage, resolve errors & warning messages and display the design in 3D for inclusion in the 3D Roadway model.

1:00 – 1:50**22 – Modeling Techniques - Roundabouts**

Presenter – Timothy Wright, Bentley Systems, Inc.

Join Bentley experts as they share techniques to model roundabouts in OpenRoads Designer.

23 - Site Modeling in OpenRoads Designer

Presenter – Sonya Pieterse, Bentley Systems, Inc..

OpenRoads Designer is not just for corridors. Yes you can do site modeling with OpenRoads Designer! Join us as we explore how to model common site design elements such as building pads, parking lots, ponds, and cul-de-sacs. You will learn how to tie all those objects together to create a terrain model. Many of these tips and tricks apply to both OpenRoads Designer, CONNECT Edition and V8i versions of InRoads, GEOPAK, MXROAD, and PowerCivil.

24 - I-74 Bridge Replacement Project Overview

Presenter – Ahmad Abu-Hawash, Iowa DOT

The I-74 bridge replacement is the largest project the Iowa DOT has let in history. The new basket-handle steel arch bridge over the Mississippi River will replace the historic suspension bridges between Bettendorf and Moline. Ahmad will provide an overview of this unique project and discuss the innovative design features being used. The presentation will also cover current construction activities.

1:00 – 1:50 CONTINUED**25 - Iowa DOT SUE efforts with OpenRoads**

Presenters – Eric Diedrich & Brett Kloss, IA DOT

The Iowa DOT began use of the SUE tools with the OpenRoads platform to model the proposed drainage structures in the proposed and existing corridor models. This modeling is used to verify that the proposed structures correctly fits in the corridors. Eric and Brett will demonstrate the different types of structures that have been created for the Iowa DOT library. They will also cover a few different methods used to place these structures in the models.

26 - Expanded Polystyrene Fill

Presenter – Paul Knievel, HDR Inc. and Matthew Cushman, Terracon

Expanded Polystyrene (EPS) Fill has emerged as a means to mitigate poor foundation soil conditions. While EPS is expensive and should be one of the last mitigation measures considered, it was the preferred solution for the I-29 project in Sioux City. This presentation will discuss why EPS was used, how it was incorporated into the project plans, and our lessons learned.

27 – All-New MicroStation V8i Top Ten Support Questions

Presenter – Patrice Rhodes, P. H. Rhodes, Inc.

This session covers another great collection of support questions and answers I have gathered while supporting administrators and users during my travels. This presentation might just prevent some problems for users, and help administrators and support people anticipate future questions.

28 – Visualization for Everyone

Presenter – Bob Rolle, Bentley Systems, Inc.

Enliven your MicroStation, ConceptStation, OpenBridge and OpenRoads models with life and nature. Produce cinematic quality visuals and animate models in real time. Yes you can do this! You don't need a visualization specialist with LumenRT! Its time you take a look at this powerful capability built into many of the applications you are already using.

2:00 – 2:50**29 - Site Modeling**

Presenter – Dan Calistrat, DTM Solutions

In this presentation we'll demonstrate how to perform Site Modeling for pads, ponds, intersections, driveways, parking lots and other locations in which a corridor model is unnecessary or more simply designed. We'll show site design through the old to new versions helping you to include these designs into your overall 3D Model.

30 – Why you Should be Using Subsurface Utilities and How to Get There

Presenter – Sonya Pieterse, Bentley Systems, Inc.

Can OpenRoads Subsurface Utilities design drainage systems like I currently do? Yes it can. Does OpenRoads Subsurface Utilities provide me additional capabilities and benefits? Yes it does. What do I need to know before implementing Subsurface Utilities? How do I ensure success when implementing Subsurface Utilities? Join us to answer these and other questions during this session.

2:00 – 2:50 CONTINUED**31- Iowa DOT BIM Pilot Project**

Presenter – Grant Schmitz, HDR Inc.

As part of the I-80/I-380 interchange for the Iowa DOT, HDR was tasked with creating a Building Information Model (BIM) for three complex curved steel plate girder bridges. The model development focused on Bentley software OpenBridge Modeler and ProStructures. The project goal was to complete a BIM model to the highest possible level of development and providing the BIM files for *construction for* information and as a BIM deliverable.

32 – Ask the Experts

Presenters – Timothy Wright/ Bob Rolle, Bentley Systems, Inc.

This session will be a question and answer session with the experts from Bentley. Get all the answers to pressing questions you may have to make your job easier.

33- Configuring Your ProjectWise Project

Presenter – Jason Dove, SE3, LLC

Getting your ProjectWise up and running and trying to figure out what is needed to configure a project? This presentation covers some basic set-up concepts to consider when configuring a new project. This includes Job Information, folder set-up, workflows, Users and User Lists, workspace assignments, GEOPAK integration for SS4, and other related items.

34 - CONNECT focused Tips and Tricks

Presenter – Jeanne Aarhus, Aarhus Associates.

This session is an assortment of time saving tips and tricks that can be used to increase your productivity in MicroStation CONNECT. Don't plan on using CONNECT just like V8i, or you will miss out on some amazing new features, some "obvious", others "hidden". Attend this session if you thinking of migrating to CONNECT and want to hit the road to CONNECT at high speed!

35 - Training Tips Discussion

Presenter – Patrice Rhodes, P. H. Rhodes, Inc.

If you have any interest or experience in training or might be tasked with some training activities, come and join me. We'll share some stories and some laughs, and in the process we'll get back to the principles that make training truly effective. We had a lot of participation in this the last time around, so I thought we could get together with some more ideas. This is a one-hour, very informal discussion that will leave you with some great pointers on how to be better at it!

7:30 - 8:00	Registration and Continental Breakfast		
Room No.	150-154	167-171	175-179
	Using OpenBridge Modeler and LumenRT <i>Steve Willoughby</i>	Surviving the transition to CONNECT <i>Jeanne Aarhus</i>	Working in a DWG Workmode <i>Steve Rick</i>
12:00 - 12:30	Lunch (Stage Door Lounge 190) Afternoon Registration		
	OpenBridge Modeler - What is it and How Can You Use it Today <i>Steve Willoughby</i>	GEOPAK Drainage <i>Dan Calistrat</i>	Annotating Designs for Civil Designers & Generating Roadway Annotation <i>Steve Rick</i>

Using OpenBridge Modeler and LumenRT

Presenter – Steve Willoughby, Bentley Systems, Inc.

In this workshop, you will learn how to create a concrete bridge using OpenBridge Modeler and enhance its visualization with LumenRT.

Surviving the transition to CONNECT

Presenter – Jeanne Aarhus, Aarhus Associates

This workshop will help the existing V8i user make the transition to the CONNECT Edition. Learn how to use your existing V8i skills and preferences to help get up to speed quickly using CONNECT. Learn to embrace the new ribbon interface and improve your interaction with MicroStation. Discover how you can raise your current MicroStation skills to the next level using the latest version of MicroStation. Don't miss out on this fun and enlightening session!

Working in a DWG Workmode

Presenter – Steve Rick, Bentley Systems, Inc.

This workshop contains exercises to learn to work with the MicroStation DWG workmode. The DWG Workmode is set in several ways, you will learn them and enable them using the best practice of keeping the workmode workset based. DWG workmode is a working environment in MicroStation that allows for the editing and review of DWG files. Your scenario for the training course is that you now work for a multi discipline engineering firm. You are tasked with creating Drainage Structure details to be delivered as AutoCAD DWG files for a local municipality. They will use these drawings within their own AutoCAD software. You are a "MicroStation shop" and could certainly create these as DGN's and deliver them as DWG. However as mentioned you are a "MicroStation shop" and need to deliver these accurately and ensuring the utmost file fidelity. To create these as DGN and deliver as DWG, it would require you to expertly master not only the file format you use, DGN but also DWG and you may not have access to the expertise in this. To maintain the highest level of file fidelity you will work on these files in the DWG Workmode, giving a "native" DWG with the highest level of compatibility.

OpenBridge Modeler - What is it and How Can You Use it Today

Presenter – Steve Willoughby, Bentley Systems, Inc.

Develop intelligent, 3D, parametric bridge models for your highway projects with Bentley's OpenBridge Modeler. Easily manage changes with built-in, user-defined relationships among bridge components and reference DGN models throughout the lifecycle of the bridge. Learn how OpenBridge Modeler's integrated workflow minimizes errors and improves efficiency. OpenBridge Modeler leverages OpenRoads geometry data (terrain, alignments, profile, and superelevation) ensuring the bridge and roadway geometry are the same and transfers directly into LEAP Bridge and RM Bridge for detailed design and analysis.

GEOPAK Drainage

Presenter – Dan Calistrat, DTM Solutions

This GEOPAK Drainage workshop uses standardized DOT files and workflows to design & analyze your Drainage project. Then we'll create plans production, resolve errors & warning messages, include Tips & Tricks, and display the design in 3D for inclusion in the 3D Roadway model.

Annotating Designs for Civil Designers & Generating Roadway Annotation

Presenter – Steve Rick, Bentley Systems, Inc.

The first part of this workshop will discuss annotation, such as text, dimensions, labels, patterns and hatching, help design features stand out. It is critical to a design by providing the means to communicate pertinent information and design intent. This course contains exercises that utilize methods to embellish a set of site plans. You will utilize tried and true annotation tools found from previous generations of MicroStation that have remained through the latest generation, the MicroStation CONNECT Edition. With the MicroStation CONNECT Edition, it continues to build upon an already broad and extensive portfolio of annotation tools. In this course, use annotation scale with a variety of tools to place text, dimensions and cells. You will utilize features such Text Styles, Fields, and Favorites. Place Notes, Callouts and Tables. As well as, place Hatching and Patterning.

The second part of this workshop contains exercises that utilize methods to embellish a set of roadway plans to communicate pertinent information and design intent. Annotation helps design features such as text, dimensions, labels, patterns and hatching stand out.

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