



Sunday 5th May

Time	Length	Room 1 (40 People - 20 Laptops)	Room 2 (40 People - 20 Laptops)	Room 3 (40 People - 20 Laptops)
		DESIGN STREAM (Novice - Intermediate)	DESIGN STREAM (Intermediate - Expert)	DESIGN STREAM (Intermediate - Expert/Admin)
8:00 - 10:00	2:00	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-1A</div> <p style="text-align: center;">Introduction to OpenRoads Designer Concepts & Capabilities</p> <p>This course is an introduction for existing InRoads & MXROAD users as well as brand new users to the concepts & capabilities of the OpenRoads Designer software. This course provides an opportunity for existing & new users to explore many of the core features & tools of OpenRoads Designer.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-2A</div> <p style="text-align: center;">Beyond Centerline Geometry</p> <p>Pavement Edges are particularly important: they streamline modeling corridors (a single template can follow edges wherever they meander). In this class you create smart, editable, obedient edges, turn lanes, tapers & driveways. You will see how OpenRoads remembers the relationships with which you built the geometry & honors it when the design changes. OpenRoads remembers your Design Intent.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-3A</div> <p style="text-align: center;">Defining Template Components and Constraints</p> <p>This course teaches how to create templates & components for those complex project situations that require more than simply modifying existing templates. This training focuses on the hinge-to-hinge backbone portion of the template. You will learn how to create pavement slabs, pavement stripes, curbs, pavement widening matching existing pavement & barriers.</p>
10:00 - 10:15	0:15	Morning Break		
10:15 - 12:15	2:00	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-1A</div> <p style="text-align: center;">Using & Editing Terrain Models</p> <p>This course reviews how to display terrain models to view different source & computed features including the boundary, triangles & contours; & teaches how to display the terrain model thematic height illustrations. You will also learn how to create terrain models by importing graphic elements, identify & fix terrain model problems, & combine multiple terrain models together.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-2B</div> <p style="text-align: center;">Quantities and Earthwork (To Be Repeated)</p> <p>In this course, you will learn various tools & methods to extract & compute quantities & end area volumes from the corridor model & much more.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-3A</div> <p style="text-align: center;">Defining Template End Conditions</p> <p>This course teaches how to create & make major modifications to template end conditions. This training focuses on the side slopes connecting the template hinge to the tie down point. You will learn how to create end conditions with multiple cut and fill slope solutions, cut slopes with a ditch adjacent to the hinge, walls & forced right-of-way solutions.</p>
12:15 - 1:15	1:00	Lunch Break		
1:15 - 3:15	2:00	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-1B</div> <p style="text-align: center;">QuickStart for OpenRoads Designer (Geometry & Corridor Modeling)</p> <p>In this course, you will be creating a horizontal, vertical alignment, & modeling the corridor of a 2 lane rural road using OpenRoads Designer. You will learn how to create, edit, review & annotate geometric elements, work with existing ground terrain & aerial imagery as well as defining 2D/3D Views.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-2C</div> <p style="text-align: center;">Practical Intersection Design and Modeling</p> <p>In this course you will learn techniques to maximize OpenRoads Designer capabilities & begin design of a multi-lane, divided intersection in 3D. You will learn how to define the horizontal layout of the intersection, set elevations & cross slopes within the intersection & how to dynamically interact with the geometry to design in 3D.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-3B</div> <p style="text-align: center;">Templates Triggers and Switches </p> <p>Learn how to create templates that use null points with component display rules. These act as triggers (or switches) to display & un-display parts of your template when linear geometry is added as corridor reference elements to a corridor.</p>
3:15 - 3:30	0:15	Afternoon Break		
3:30 - 5:30	2:00	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-1B</div> <p style="text-align: center;">QuickStart for OpenRoads Designer (Geometry & Corridor Modeling) ...continued</p> <p>You will learn how to create a Corridor, assign template drops, create dynamic cross sections & review the Corridor & 3D model. You will also learn how to use parametric constraints & point controls to vary pavement depths & shoulder widths, how to create & assign superelevation to a Corridor & lastly how to compute quantities from the 3D model.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-2C</div> <p style="text-align: center;">Practical Intersection Design and Modeling...continued</p> <p>Once the geometry is defined, you will learn how to use the horizontal, vertical & model detailing tools to create a true, solids-based intersection model which includes pavement layers, islands, curbs & footpaths. You will also learn how to leverage the design model for analysis, plan production & data delivery for construction.</p>	<div style="background-color: #4CAF50; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); display: inline-block;">Workshop 1-3C</div> <p style="text-align: center;">Using and Defining Superelevation </p> <p>In this course, you will learn how to create, edit and review superelevation information using the tools provided in OpenRoads Designer. You will learn about the Superelevation XML preference file that controls how superelevation is calculated. You will learn how to create superelevation sections, lanes and transitions and how to apply the superelevation transitions to your corridor. You will also learn how to review and edit superelevation data.</p>

Monday 6th May							
Time	Length	Room 1 (44 People - 30 Laptops)	Room 2 (44 People - 30 Laptops)	Room 3 (20 People)	Room 4 (20 People)		
		DESIGN STREAM (Novice - Intermediate)	DESIGN STREAM (Intermediate - Expert)	PROJECT DELIVERY STREAM	TECH TALK (40 mins each (unless otherwise shown))		
8:00 - 10:00	2:00	Workshop 2-1A Quantities and Earthwork (To Be Repeated) In this course, you will learn various tools & methods to extract & compute quantities & end area volumes from the corridor model & much more.	Workshop 1-2C QuickStart for OpenRoads Designer Drawing Production (To Be Repeated) Learn to create & annotate cross section sheets & plan & profile sheets. You will also learn to add individual annotations to label specific location coordinates, station-offset values, elevations & more.		Tech Talk 4A Drainage Design and Analysis to AR&R 2016 In this session we will walk through the drainage design & analysis functionality for AR&R 2016. This will include importing BoM IFD data & temporal patterns, importing & laying out a conveyance system, creating catchments to use initial & continuing losses, checking gutter flow widths, running an ensemble of storm events & analysing the results. We will also include workflows for attributing your Building Information Model & creating reports & drawings. Time will be allocated for an extensive Q&A session.		
10:00 - 10:15	0:15	Morning		Break			
10:15 - 12:15	2:00	Workshop 2-1B QuickStart for OpenRoads Designer Drawing Production (Repeat) Learn to create & annotate cross section sheets & plan & profile sheets. You will also learn to add individual annotations to label specific location coordinates, station-offset values, elevations & more.	Workshop 2-2B Ramp & Interchange Design Learn to create & annotate cross section sheets & plan & profile sheets. You will also learn to add individual annotations to label specific location coordinates, station-offset values, elevations & more.		Tech Talk Conveying Asset Management with OpenRoads Designer During this session you will learn to assign & use Item Types using the new Asset Management tool.		
					1:55 - 2:35 (Room Left Vacant for Meetings)		
					Tech Talk Shaping the Future of OpenRoads Open discussion session on future product development.		
12:15 - 1:15	1:00	Lunch		Break			
1:15 - 1:55	2:00	Workshop 2-1C QuickStart Using ConceptStation (Road & Rail) 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.	Workshop 2-2C Evaluating & Laying Out a Storm Network We will start by using Review & Evaluation tools to explore a utilities-rich file. You will master being able to describe the engineering of any utilities file. Then we will lay out inlets, pipes & catchments to model a storm network.	Presentation 2-3A Multidiscipline Project Delivery Wide ranging overview on alignment of international & Client based standards for extending the value of an asset beyond design. Challenges facing Design Teams when creating a Connected Data Environment, managing the quality and flow of design information and how to report and distribute project deliverables under increasingly compressed timelines.	Tech Talk (User)		
1:55 - 2:35							1:55 - 2:35 (Room Left Vacant for Meetings)
2:35 - 3:15							Tech Talk 4E OpenRoads Designer Modeling Join a Bentley expert for a problem solving session focused on ORD Modeling. Bring your questions. This is an interactive Q&A session & not a prepared presentation.
3:15 - 3:30	0:15	Afternoon		Break			
3:30 - 4:10	2:00	Workshop 2-1D Integrating Reality Models into Civil Design In this workshop you will work with disparate data aligning spatially referenced information to generate a working design for volume comparison between various models all within the Open Roads environment. The user will also be introduced to how the reality models are generated inside of ContextCapture by creating a basic Photogrammetric model.	Workshop 2-2D Hydraulic Design and Analysis In this session we will start by looking at peak flow methods for design and analysis, then we'll move on to simulation - using a storm event which models how intensity varies with time, and how catchment areas & the conveyance system respond to it.	Presentation 2-3B ProjectWise & Civil Infrastructure Applications ProjectWise is a pseudo default environment for collaboration on Infrastructure projects, however the power of the tool is seldom extended. In this session a panel of experienced practitioners will outline their experiences crafting PW to effectively support project outcomes.	Tech Talk 4F (User)		
4:10 - 4:50							4:10 - 4:50 (Room Left Vacant for Meetings)
4:50 - 5:30							Tech Talk OpenRoads Designer Drawing Production Join a Bentley expert for a problem solving session focused on ORD Drawing Production. Bring your questions. This is an interactive Q&A session & not a prepared presentation.

Tuesday 7th May									
Time	Length	Room 1 (44 People - 44 Laptops)	Room 2 (30 People)	Room 3 (30 People)	Room 4 (20 People)				
Keynote									
8:30 - 10:00	1:30	Welcome & Introductions (10 mins)							
		Industry Keynote - The New Digital World (40 mins)							
		Bentley Keynote (40 mins)							
10:00 - 10:15	0:15	Morning		Break					
10:15 - 12:15	2:00	Bentley Technology Update (50 mins)							
		User Presentations (55 mins)							
		BCUAA AGM (30 mins)							
12:15 - 1:15	1:00	Lunch		Break					
		DESIGN STREAM (Novice - Intermediate)	DIGITAL ENGINEERING STREAM	PROJECT DELIVERY STREAM	TECH TALK (90 mins each)				
1:15 - 3:15	2:00	Workshop 3-1A	<p style="text-align: center;">OBM - Concrete Precast Model</p> <p>This hands-on workshop will introduce you to the world of OpenBridge Modeler where you will learn how to create a model for a concrete girder bridge. This course will be taught using the OpenBridge Modeler Connect Edition software.</p>	Presentation 3-2A	<p style="text-align: center;">Digital Engineering - A Bentley Systems Approach</p> <p>We've all heard the term Digital Engineering (DE) bandied about in our industry. But what is it, who does it benefit and how can it be applied? In this session, we will ask and address the above and will provide an insight into how Bentley Systems is approaching the Digital Engineering (DE) conundrum.</p>	Presentation 3-3A	<p style="text-align: center;">Review & Markup</p> <p>In a multidiscipline, multi company design environment, generating and recording comments, then distributing and reviewing are important aspects. In this digital phase, designers need to consider both traditional and new techniques for managing change. In this session, we will explore some of these elements and how they can be used to provide more comprehensive recording techniques.</p>	Tech Talk 4G	<p style="text-align: center;">Adding Value to Rail Projects with OpenRail Designer</p> <p>Explore how OpenRail Designer extends OpenRoads Designer with rail specific tools including turnout & crossing geometry, regression, cant, 3D rail design, & sleeper modeling. We will also look at workflows to model mainline tracks, yards, & tunnels & hear about the latest software enhancements & plans for the future. You will leave understanding why you want to use OpenRail Designer on your next rail project. Time will be allocated for an extensive Q&A session</p>
		Afternoon		Break					
3:15 - 3:30	0:15	Afternoon				Break			
		Workshop 3-1B	<p style="text-align: center;">QuickStart Using gINT Civil Tools</p> <p>gINT Civil tools is used to load geotechnical data in 2D models (mapping workflow for drilling plan creation & preliminary studies) as well as in 3D for subsurface interpretation & BIM workflows. In this course you will learn to connect to a gINT project file & display various aspects of the borehole data.</p>	Presentation 3-2B	<p style="text-align: center;">Digital Engineering - A Bentley Systems Approach (cont)</p> <p>In this session, we will continue to de-mystify the Digital Engineering conundrum and introduce the concepts of Bentley Systems "Digital Twin". Rounding out this session will be a lively discussion from a number of DE Leads, including those from Engineering Consultants, Construction Contractors, Clients and Owners. A focus on what is important to these personas and where they see value within a DE approach will be discussed.</p>	Presentation 3-3B	<p style="text-align: center;">The CONNECTION Client</p> <p>On the surface, the Bentley CONNECTION Client which is bundled with CONNECT versions of Bentley applications may appear to have limited value. However a more careful look under the hood reveals a host of useful techniques and tools. In this session, we will explore some of these elements and how they can be used to improve project outcomes.</p>	Tech Talk 4H	<p style="text-align: center;">OBM & RM Bridge - Segmental Bridges</p> <p>Join us in this lecture in which a segmental bridge will be modeled with construction stages. Then, send the bridge for analytical calculations into RM Bridge for the calculation of dead and live loads and definition of a tendon layout configuration. Time will be allocated for an extensive Q&A session</p>
5:30 - 5:45	0:15	Closing							