## TR21478-R The Future of Making Bridges – The Journey

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#### Introductions



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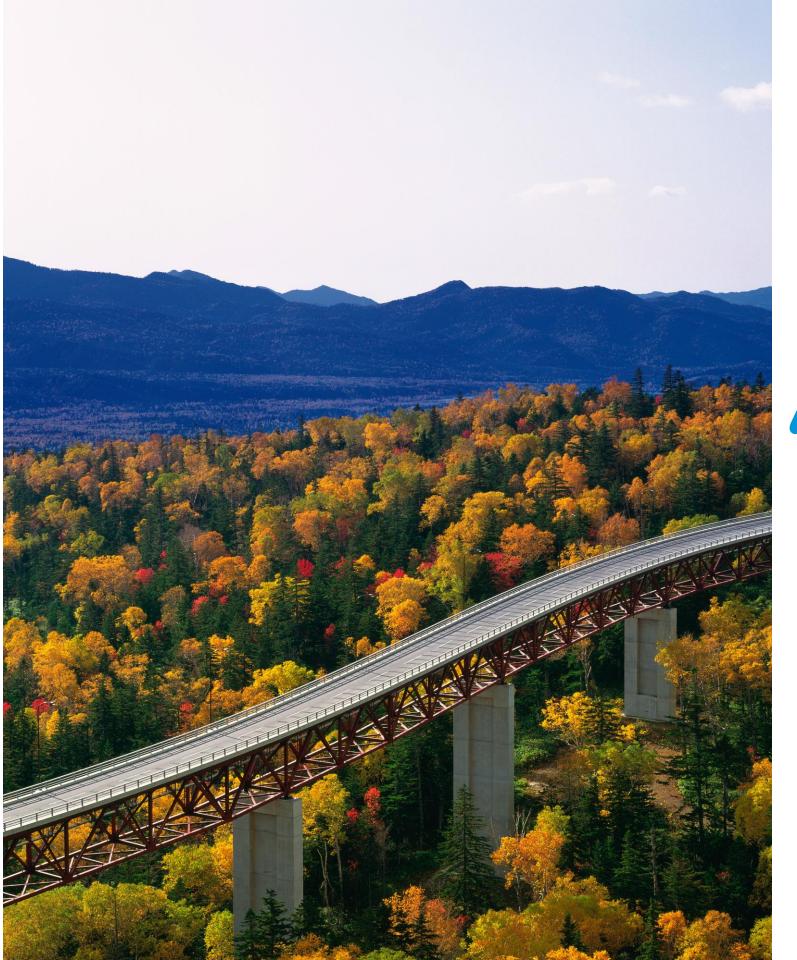
**Drew Olsen**Senior Industry
Strategy Manager for
Transportation



**Byran Otey**Engineering Director for AEC Structures.





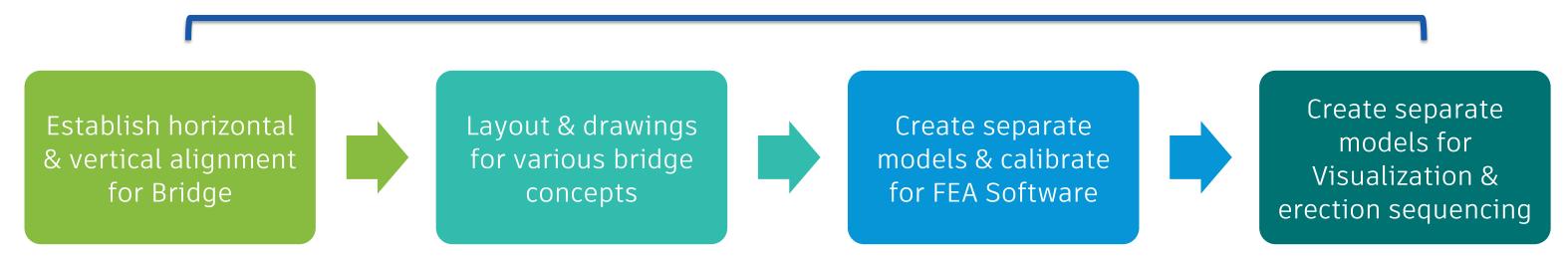


### "The Journey"



#### The Present

Repeat all the steps when modifying concepts





# Imagine



#### The Future

### Live Demo







# Questions



#### **Tools & Workflows**

- 1. What tools and workflows are you currently utilizing to deliver your bridge projects?
- 2. What limitations, challenges and pain points are you discovering.
- 3. What best practices have you discovered?



#### Documentation

- How do you deliver 2D representation of the 3D bridge model including standard 2D Families currently?
- 2. What is the quality & standard of documentation required to meet your unique regional industry and regulatory specifications? Does it deliver the most realistic layouts and quality documentation in a limited timeframe?
- 3. Do the current tools and workflows meet the requirements? If not where do they fall short and how do you currently work around this?



### Modelling

- 1. What challenges do you face with modelling?
- 2. How do you manage to model complex bridges with curved decks incorporating cross fall and vertical camber?
- 3. What are your requirements for modeling reinforcement?
- 4. Where there is repetition in the bridge elements such as girders do you model reinforcement for a typical one or do you model them all?





#### Simulation & Visualization

- 1. What do you think of the feasibility of inserting the Engineer much earlier in the conceptualization phase?
- 2. Is it dependent on who owns the concept phase of the project. Sometimes this is owned by another stakeholder and is out of their control?
- 3. What advantages could it deliver for your bridge project?
- 4. Would it save time and money including and quicken the flow from preliminary to detailed design?



#### **BIM**

- 1. What are the current expectations for BIM Deliverables for your projects?
- 2. If you are delivering BIM what amount and type of information do you incorporate?
- 3. Does this have an impact on model performance?
- 4. IFC was designed for Building Information initially, but plans are underway for incorporation of bridge components. How do you workaround this for bridges at present?



### **Training & Equipping**

- 1. How do you identify, train, equip and support your staff in an efficient and cost effective manner?
- 2. What has been your experience with the interoperability between the various tools?



### Survey

Please fill out survey





# Thank you





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