

COMPLETE BRIDGE MODELING, ANALYSIS, AND DESIGN PROJECT WORKFLOW CHECKLIST

Create bridge designs with all the capabilities you need to deliver projects faster. A true BIM model at the beginning of a bridge project will improve design quality, constructability, and collaboration.

In traditional workflows, bridge and other civil designers work in silos with very little information sharing or reuse of data. For example, terrain data and roadway geometry are generated by roadway engineers and surveyors, and this data is shared with bridge engineers via paper copy or methods that require manual data entry or export into a new format. This process introduces unnecessary project risk with the potential for inaccurate or outdated data entry, resulting in delays to the project schedule and cost overrun. Ensuring your software is a comprehensive application created for bridge modeling, analysis, design, detailing, and documentation will improve collaboration across project stakeholders leveraging open data to support large datasets required on multidiscipline projects. OpenBridge® has automated and intuitive bridge-specific features so teams can do more with existing staff, without programming or customization. With one data-centric workflow and file format consistency you will eliminate workarounds, increase accuracy, and automate the production of a variety of contract deliverables to accelerate overall project delivery. Using a BIM methodology can increase the efficiency of bridge modeling by 40% and can save up to 20% of the construction budget. The real value of BIM for bridges is the 3D model digital deliverable that can produce 2D plans automatically.

OpenBridge does just that.

Use the checklist below to compare your current software with OpenBridge. Can your current software advance your bridge design workflows up to 40%?

The benefits of a fully integrated modeling, analysis, and design bridge solution:	OpenBridge	Current software
Generate analytical models with a single click from the physical BIM model	♦	
Out-of-the-box parametric and intelligent bridge objects automatically reacting to change	•	
Supports all bridge types (everything from prestressed girder to segmental)	•	
Choose from over 20 international design codes	•	
Comprehensive 3D physical bridge modeling	•	
Perform full intelligent analysis	•	
Complex structural analysis (including hydrodynamic, high-speed rail, and wind buffeting)	•	
Model entire bridges in a single package	•	
Handle bridge structures in the context of civil geometry	•	
Reference roadway information and ground data	•	
CADD platform (no need to export files to complete plans production)	•	
Automated drawing generation	•	
Reinforcement modeling, detailing, and scheduling	•	
Superstructure and substructure modeling and design	•	
Parametric, intelligent bridge components	•	
Intuitive, dialogue-driven workflows	•	



COMPLETE BRIDGE MODELING, ANALYSIS, AND DESIGN PROJECT WORKFLOW CHECKLIST

The benefits of a fully integrated modeling, analysis, and design bridge solution:	OpenBridge	Current software
Rule-based and constraint-driven modeling	•	
Clash detection and clearances	•	
Detailed and organized design and bridge geometry reports (in various formats)	•	
BIM deliverables	•	
Plan, profile, cross section and detail section sheet generation	•	
Construction documentation	•	
Native integration with Bentley software	•	
Integration with third-party applications	•	

This is the industry leading solution for bridge engineers – and the only solution you need to meet all bridge design and construction needs.

LEARN MORE



1.800.BENTLEY (1.800.236.8539) | Outside the US +1.610.458.5000 | GLOBAL OFFICE LISTINGS bentley.com/contact