



*News Alert*

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## **Infrastructure Projects in China Named as Finalists in Bentley Systems' 2022 *Going Digital Awards in Infrastructure***

*Winners to Be Selected and Announced on Nov. 15 as Part of Bentley's Year in Infrastructure and Going Digital Awards*

EXTON, Pa. – Oct. 17, 2022 – Bentley Systems, Incorporated, the *infrastructure engineering software* company, has announced several projects from China as finalists in Bentley's 2022 *Going Digital Awards in Infrastructure*. The annual awards program honors the extraordinary work of Bentley software users advancing infrastructure design, construction, and operations throughout the world. Eleven independent jury panels selected 36 finalists from over 300 nominations submitted by more than 180 organizations from 47 countries encompassing 12 categories.

The *Going Digital Awards in Infrastructure* finalist project presentations will be available for viewing using [this link](#) on **Nov. 7**. Visit the site to hear from the people behind these extraordinary infrastructure projects as they tell their stories of leveraging digital advancements to achieve unprecedented outcomes.

The China projects named as finalists for the 2022 *Going Digital Awards* are:

### **Bridges and Tunnels**

In-depth and Collaborative Application of BIM Technology in the Second Section of Chengdu's East-West City Axis

Southwest Municipal Engineering Design & Research Institute of China, Chengdu, Sichuan, China

The Southwest Municipal Engineering Design & Research Institute selected OpenBridge Modeler and OpenRoads to perform parametric 3D design, which helped to quickly create bridge and tunnel models for a new road. Using Bentley's integrated modeling and analysis applications, they identified and resolved 132 clashes to shorten the design cycle by 20% and saving millions of yuan. Working in a collaborative digital platform improved design quality, mitigated risks, and established a digital foundation that accelerated the construction of a modernized smart city infrastructure.



[High Res Image of The Second Section Of Chengdu's East-West City Axis](#) Image courtesy of Southwest Municipal Engineering Design & Research Institute of China

Section C and D of the Infrastructure Construction Project of City-industry Integration Belt between Fushun County and Rong County of Zigong  
Zigong Urban Planning and Design Institute Co., Ltd., Zigong City, Sichuan, China

Zigong Urban Planning and Design Institute selected OpenBridge and OpenRoads to establish an open connected data environment and a digital construction management platform for developing a new road. By linking the 3D models with the planned construction timeline, they ensured the project stayed on schedule. Using Bentley's applications identified problems prior to on-site works, improving overall project control. The solution enhanced design quality, reduced risks, and saved time and costs.



[High Res Image of City-industry Integration Belt](#) Image courtesy of Zigong Urban Planning and Design Institute

## Construction

Application of BIM Technology in Ultra-deep Water Transmission Tunnel in Pearl River Delta  
China Railway 18th Bureau Group Co., Ltd., Foshan, Guangdong, China

The Pearl River Delta Water Resources Allocation project is the largest water conservancy investment ever made in Guangdong province. China Railway 18<sup>th</sup> Bureau Group selected Bentley's open 3D modeling applications to perform coordinated design and analysis, which helped to identify more than 100 design collisions, saving CNY 1.68 million in costs. Working in a cloud-based environment streamlined accurate data sharing, enabling real-time access to 3D models and design information, accelerating the digital construction process. Digitally integrating design and construction works reduced the originally planned construction area and maintenance expenses.



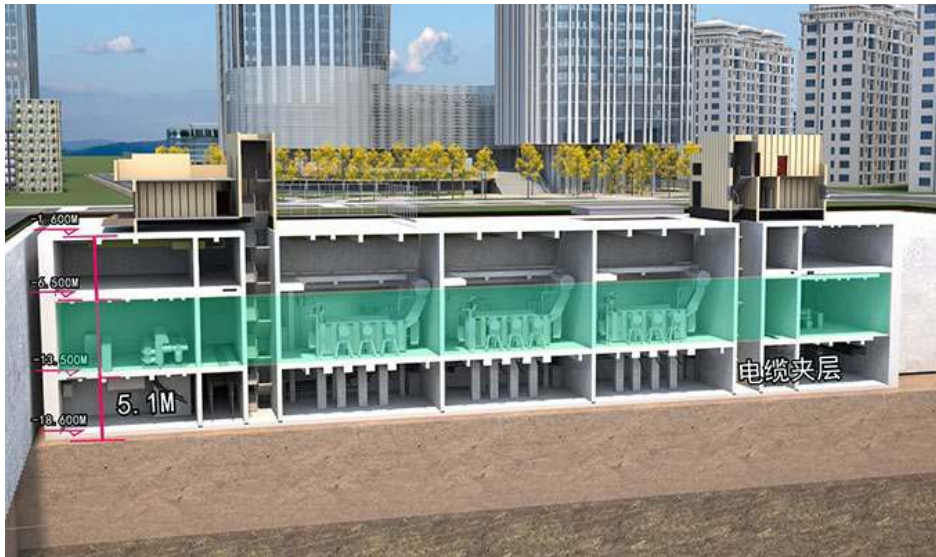
[High Res Image of Ultra-Deep Water Transmission Tunnel](#) *Image courtesy of China Railway 18th Bureau Group*

## Grid

Full Life-cycle Digital Application in Wuhan Xudong 220 kV Substation Project  
POWERCHINA Hubei Electric Engineering Co., Ltd., Wuhan, Hubei, China

Leveraging MicroStation and SYNCHRO, the team performed collaborative modeling, collision detection, and construction simulation to optimize the design and construction of the substation while saving a combined CNY 538,100. Working in a digital environment effectively resolved the insufficient soil bearing capacity and safety risks associated with the narrow construction space. Bentley's comprehensive BIM solution reduced the construction period by 74 days and provided the basis for developing a digital twin of the power grid for full digital lifecycle operations and maintenance management.

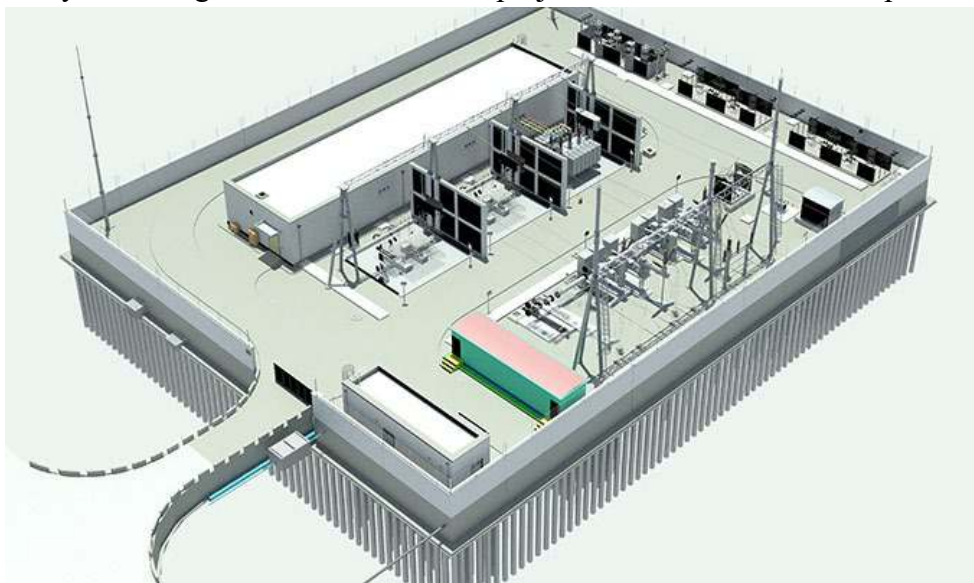




[High Res Image of Wuhan Xudong 220kV Substation Project](#) Image courtesy of POWERCHINA Hubei Electric Engineering

Comprehensive Application of BIM Technology for Power Transmission and Transformation Engineering Construction  
State Grid Hengshui Electric Power Supply Company, Hengshui, Hebei, China

Leveraging Bentley's 3D and reality modeling technology with ProjectWise, the team effectively planned the substation layout, reducing total land area by 52.42%, avoiding more than 50 reworks, and saving CNY 3 million in project changes. Through collaborative digital design and construction workflows, they saved CNY 7.54 million in investment costs and reduced the construction period by 30 days. Using Bentley's applications to develop the substation digital twin set a benchmark for lifecycle 3D digitization of substation projects for the State Grid Corporation.



[High Res Image of Qinghan substation](#) Image courtesy of State Grid Hengshui Electric Power Supply Company

To view the full list of awards finalists, visit <https://yii.bentley.com/award-finalists>.

Winners will be announced on Nov. 15, 2022.

If you would like to request a media interview with a *Going Digital Awards* finalist or Bentley colleague, click [here](#). If you have any other media-related questions please contact your Bentley PR contact or Christine Byrne at [Christine.Byrne@bentley.com](mailto:Christine.Byrne@bentley.com) (U.S., U.K.), or Michaela Romero at [Michaela.Romero@bentley.com](mailto:Michaela.Romero@bentley.com) (EMEA, Asia, LA).

The 2022 *Year in Infrastructure and Going Digital Awards* Virtual Press Kit offers access to event registration, *Going Digital Awards* finalists' sessions, access to press announcements, images, awards winners and finalists' information, media interview request form, and more. Check out the Virtual Press Kit at <http://yii.bentley.com/press>.

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### **About Bentley Systems**

Bentley Systems (Nasdaq: BSY) is the *infrastructure engineering software* company. We provide innovative software to advance the world's infrastructure – sustaining both the global economy and environment. Our industry-leading software solutions are used by professionals, and organizations of every size, for the design, construction, and operations of roads and bridges, rail and transit, water and wastewater, public works and utilities, buildings and campuses, mining, and industrial facilities. Our offerings include *MicroStation*-based applications for modeling and simulation, *ProjectWise* for project delivery, *AssetWise* for asset and network performance, Seequent's leading geoprofessional software portfolio, and the *iTwin* platform for infrastructure digital twins. Bentley Systems employs more than 4,500 colleagues and generates annual revenues of approximately \$1 billion in 186 countries.

[www.bentley.com](http://www.bentley.com)

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