Value Description

Novapoint Bridge

CONNECTED CONSTRUCTION

Trimble.

Designing structures with Novapoint

Novapoint Bridge helps bridge- and concrete structure designers who want to design a structure following one or more reference lines. Novapoint Bridge is offering smart connection mechanisms between the designed structure and the reference lines, enabling the designers to shape their structures exactly the way they want.

Key features

- Modelling structures
- Drawing tools
- Extendable cross section library
- Functions for 3D-modelling
- Advanced tools for drawing road lines
- Calculation tools

Modelling the geometry

Novapoint Bridge reads road and terrain data from the project dataset. The geometry of the structure connects to the road geometry through several smart connection mechanisms.

All the breaking points (vertexes) of the cross-section of the structure connect to the road profile through specified connection mechanisms. Both linear interpolation and several polynomial formulas are available to describe the longitudinal geometry between two cross-sections.

You can select predefined cross-sections from a library as well as add new ones. The library is stored as an ASCII-formatted file.

Construction drawings

You can easily produce drawings such as cross-sections, plan drawings and longitudinal profiles using Novapoint Bridge. In addition, Novapoint Bridge provides you with tools that easily generate tables with calculated geometric values such as elevations, coordinates, widths, heights and gradients.

Functions for 3D-modelling

Novapoint Bridge offers fast and easy 3D-modeling of the structures. Functions for inserting modelled 3D-elements along road lines, such as piers and abutments, are also included. The automatic 3D-model production is done in AutoCAD and can easily be imported into Quadri using conversion rules shipped with the installation.