

## Wyvern Way, Derby for Galliford Try

The Wyvern Way project, which was due to be constructed by Galliford Try, was a project to convert an existing roundabout to a signalised crossroads. A screenshot of the existing junction from Google is shown below.



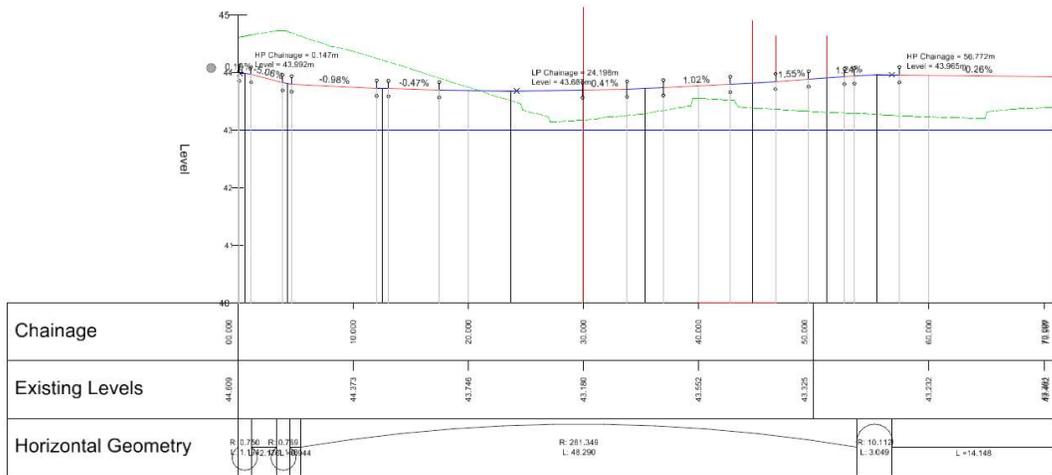
Cassidy Forsythe were approached by Galliford Try to create a 3d model for them from a design already carried out by the Employer.

It was apparent that the design had been carried out using 3d design software, however Galliford Try had not been given a 3d model. They were only given 2d plans and long sections which were not much use to them as some of the long sections did not even include proposed levels, even though the channels had obviously been design and had geometry attached to them.

A screenshot of the general layout plan provided to Galliford Try is shown below. As can be seen, the design provided consisted of differences in levels at various locations

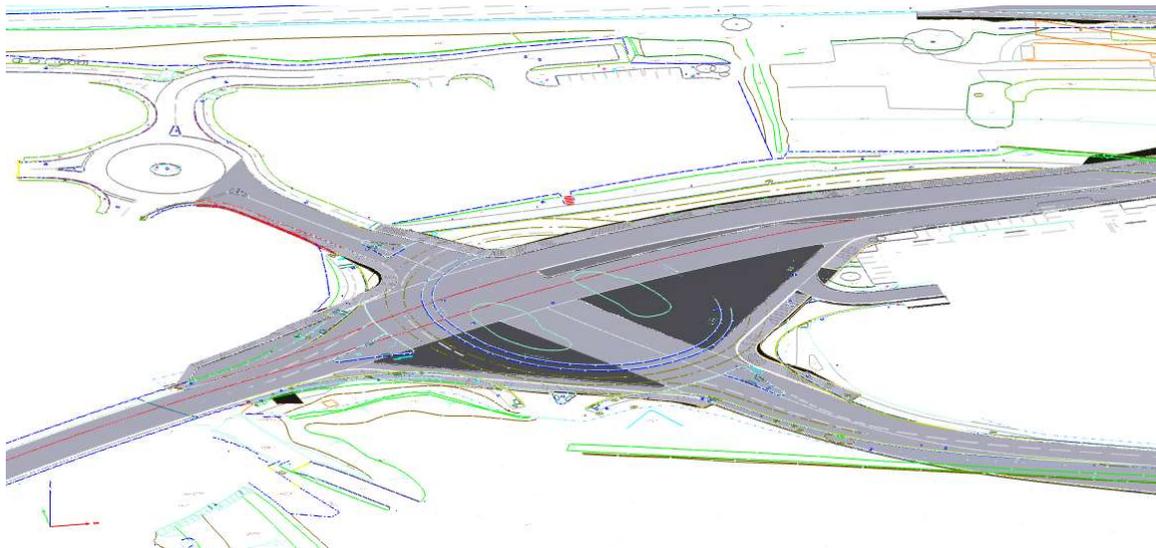


Galliford Try were also supplied with long sections as shown below



As can be seen, proposed levels were not provided, however the geometry information was provided and a 2d cad drawing was supplied. This allowed us to measure from the cad drawing to determine some of the proposed levels. Using these levels and the vertical geometry information provided allowed us to create horizontal and vertical alignments in our new 3d model. Once we had created all of the alignments using the Bentley Openroads tools we were able to apply surface templates to the road terrain models, allowing us to create the various pavement layers. We also added kerbs to the alignments where appropriate.

A screen shot of our final model is shown below



The 3d model we supplied to Galliford Try allowed them to get an appreciation of level differences, earthworks slopes and general construction issues.