

Delivering safe and trusted traffic management for high profile road closures

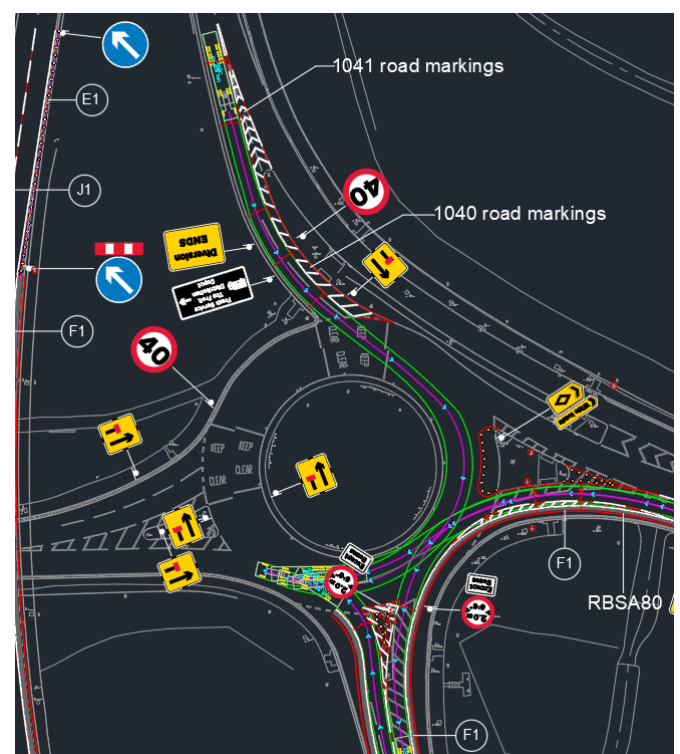
The A2 junctions Bean and Ebbsfleet has historically had constrained economic development in the area. Consequently, they are being improved to accommodate increased traffic and boost the economy in the area through access to better facilities. Highways England awarded Balfour Beatty the contract for improvement works to the A2 Bean and Ebbsfleet junctions near Dartford in Kent

The Challenge

Balfour Beatty's aim was to improve traffic flow by enlarging the existing roundabouts, implementing a new traffic light system, adding a slip road for east bound traffic and building a new bridge over the A2. The project demanded a phased approach to the work that required temporary traffic management designs. Each phase had to ensure that works could progress efficiently while minimising impact on local traffic and communities. The complexity of the site layout also made it difficult to determine whether temporary traffic management could be installed while maintaining adequate safety zones for the workforce and travelling public.

Our Solution

Chevron TM worked in collaboration with the client to fully understand the requirements to develop a robust brief. The first stage was to determine if a swept path analysis was required. By identifying where the desired working areas were to be located, the road widths were then analysed to determine the maximum lane widths that could be achieved under temporary traffic management. A topographical survey of the site was commissioned to assist. Any areas that presented a challenge – such as roundabout exits – were then checked using swept path analysis to ensure that a wide range of vehicles could navigate the narrower lanes safely.



Balfour Beatty A2 Bean and Ebbsfleet project Highways

Challenging areas such as the existing slip road that needed to be widened required a different approach. After reviewing the area, Chevron TM advised Balfour that it would be impossible to fit temporary traffic management in this area and still maintain an adequate, safe working zone. To overcome this, Chevron TM approached the local authority to obtain permission to reduce the slip road to one lane, which would enable a work zone to be safely accommodated. The team developed a phasing strategy for the site based on the client's programme of works and desired working areas.

When the initial designs were completed, the drawings were sent to the Operations team for a second check. This ensured that any issues could be identified and addressed before the works were on site. The design was updated as required based on this feedback.

Once the traffic management options and phasing were designed and drawings created, Chevron TM drafted the TTRO application for the works. Preparing the TTRO application required a thorough approach to ensure that every potential restriction being applied for was included on the application form and adequately described in enough detail to ensure its approval. Drawings were developed specifically for the TTRO application, which provided a visual guide of the areas that need to be restricted in relation to the rest of the works. Once the design was completed and the TTROs obtained, the team prepared a document that recorded all the design decisions made for this project. This was submitted to the client along with the final traffic management design, which would provide a useful audit trail had any incidents occurred during the works.

Chevron TM brought experience, expertise, local knowledge and professional design services to this project. An in-depth understanding of the TTRO application process ensured that the all relevant and detailed information was submitted at an early stage which helped secure approval.

About the client

Balfour Beatty plc is a multinational infrastructure group based in the United Kingdom with capabilities in construction services, support services and infrastructure investments.

Balfour Beatty