



## **Case study**

Project brief: Here, the two partners, Southern Water Services and Miller Civil Engineering, were responsible for the design and construction of a major drainage system in Hastings Town Centre. At ALS the first priority was to appoint a dedicated project manager, who would be ideally suited to the client's requirements. Someone who had supervised several tunnelling projects previously was the ideal choice. From this point until the project's completion ALS' project manager was on call to provide service 7 days a week 24 hours a day.

The next task was to assess the movement options. The tunnelling machine itself weighed in excess of 600 tonnes with individual items up to 145 tonnes in weight and 14 metres in length, ALS knew the equipment as they had been involved in several other projects for its manufacturers, Herrenknecht GmbH.

One area in which ALS is able to offer a wide range of services support is in the field of major civil engineering projects. By their very nature they are often globally sourced, and need the services of a dedicated ALS Project Manager.

Here the two partners, Southern Water Services and Miller Civil Engineering, with the co-operation of Hastings Borough Council were constructing a major drainage scheme in the middle of Hastings Town Centre.

The value of the work carried out by Miller, as main contractor was in excess of £46 million. Miller were faced with finding the right specialist equipment to undertake the tunnelling and secondly, they were going to have to bring this through the historic market town of Hastings. Both these tasks in themselves are massive undertakings. Miller having located an ideal tunnelling machine in Southern Germany, then had the immense task of getting it to the site in the United Kingdom.

ALS was selected to investigate, develop and implement the transportation solution for the Hastings project.





## The success of the operation was such that ALS were called upon again to return the machine back to Germany when its work was done.

The machine, 55m long and 7.4m in diameter, with cutting jaws big enough to carve a hole which could take a double decker bus, had been dismantled into four sections for easier transport. At these dimensions, the Department of Transport would not allow the parts to be transported on the UK road network.

The local and regional infrastructure would not be able to cope with such a movement. The most logical solution was to use the sea as a means of transport.

A detailed investigation was carried out by ALS and the Contractor, Miller Civil Engineering, establishing a suitable method acceptable to the Dept of Transport.

The solution involved beaching a flat bottomed pontoon on the Hastings seafront, then transferring the equipment onto road vehicles for its final journey through the town.

This would involve the removal of thousands of tonnes of sand and its replacement within a period of 24 hours. A further requirement was for a temporary track way to be laid. This would allow the vehicles travel access on and off the beach and pontoon. Environmental issues would need to be taken very seriously and protective measures put into place.

Cranes, anchorage trucks, support vehicles, hauliers, policing and public safety all had to be arranged if all was going to be successful. In all six months of careful planning was required.

This planning had to include everything from tidal predictions, weather forecasts through to public interest. The operation would result in 10 major roads being closed for 8 hours, so everything had to work perfectly, first time.





