
CASE STUDY:

SUB CENTIMETRE ACCURACY AND IMPROVED STAFF SAFETY ACHIEVED ON HIGHWAYS



**SPECIALIST SOLUTIONS
FOR MOBILE MAPPING**

WWW.3DLASERMAPPING.COM



CLIENT:

ALFRED MULDER MOBILE MAPPING MANAGER AT GEOMAAT

Based in the Netherlands, Geomaat is a land surveying and engineering company that specialises in geospatial information, infrastructure and mobile mapping.

With over 10 years in the industry, Geomaat upholds a high degree of innovation, quality and service – both nationally and internationally.

Geomaat was the first company to purchase a StreetMapper system in 2009, which made use of 360-degree scanners. This technology is now standard of all current mobile mapping systems provided by 3D Laser Mapping.



THE CHALLENGE:

IMPROVING SAFETY, ACCURACY AND TIME

With the majority of Geomaat's work being road and highway survey based, the safety of staff is of great importance. Safety must also be achieved without compromising the quality of work produced for their customers.

Traditional methods of measurement were previously used to carry out survey projects, such as the use of quads to measure automated white paint markings. This method of surveying had to be carried out at night with roads closed off. This was both costly and time-consuming.

A mobile mapping system was seen as the solution to keep staff safe, reduce time and money and maintain high accuracy across each project.



THE SOLUTION: STREETMAPPER

StreetMapper was selected from 3D Laser Mapping following a series of rigorous field tests.

It proved to deliver the best accuracy when compared to other systems on the market. The fact that it can be customised to suit a range of requirements meant that the solution was also favoured over other solutions.

PUT TO THE TEST:

Soon after delivery, StreetMapper proved itself to be a flexible and easy to use solution as Geomaat undertook a large project in Sweden.

The project involved scanning highways, in particular, the drainage system running along the sides of the roads. To accurately measure the drains, the framework of the system was raised to extend its field of view.

“This project was very successful due to the 100% perfect support from 3D Laser Mapping”

- Alfred Mulder



“We need to achieve 0.1% slope accuracy when carrying out re-pavement projects. Another reason (for choosing StreetMapper) was the flexibility of the system; the Lifting Platform is especially handy for us. We wanted to maintain a specific vehicle for mobile mapping, so the lifting platform is perfect when you want to hide the system and park the vehicle securely - especially at night.”

- Alfred Mulder



“One of the main advantages of the StreetMapper is the fact we can adapt it for use on different projects ... we have also mounted our system on the railway and also on a boat to map the coastlines. Mainly we use the system mounted on the vehicle for re-pavement projects, Digital Terrain Models (DTM's) and As-Built Surveys, we also use it for free heights and bridge surveying.”

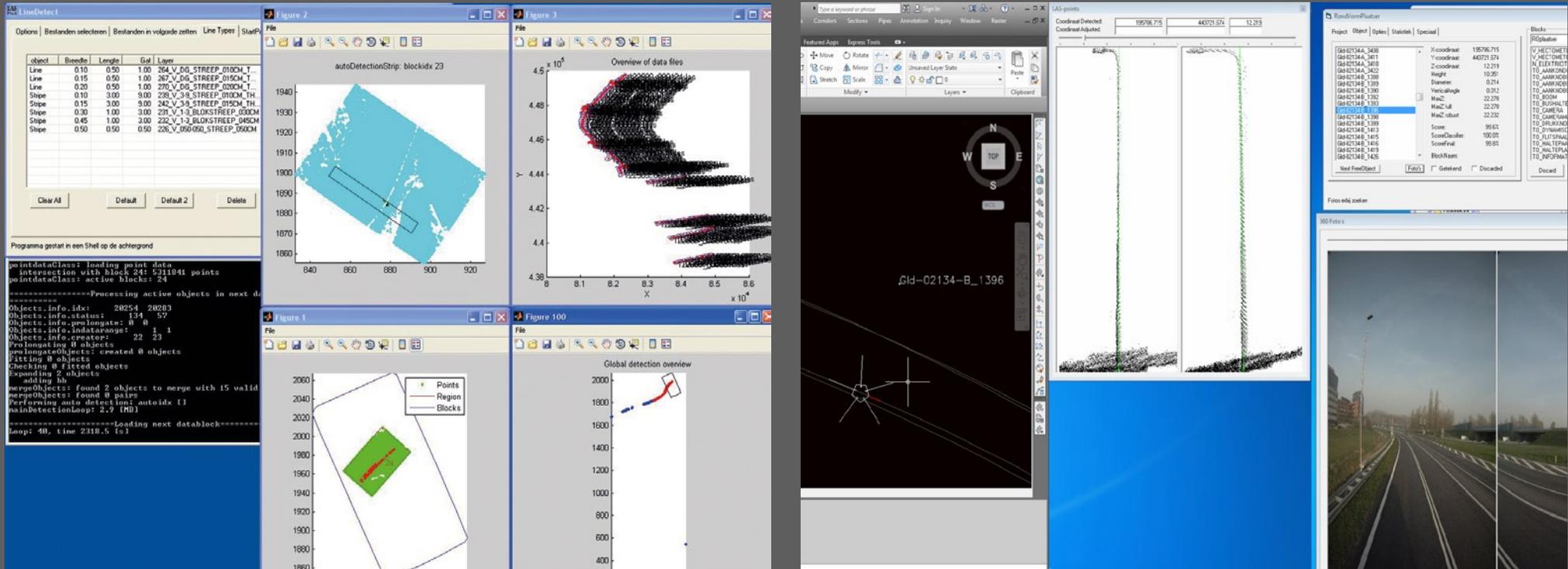
- Alfred Mulder



UNIQUE SOFTWARE INTEGRATION

Geomaat have since developed their own software to use alongside StreetMapper.

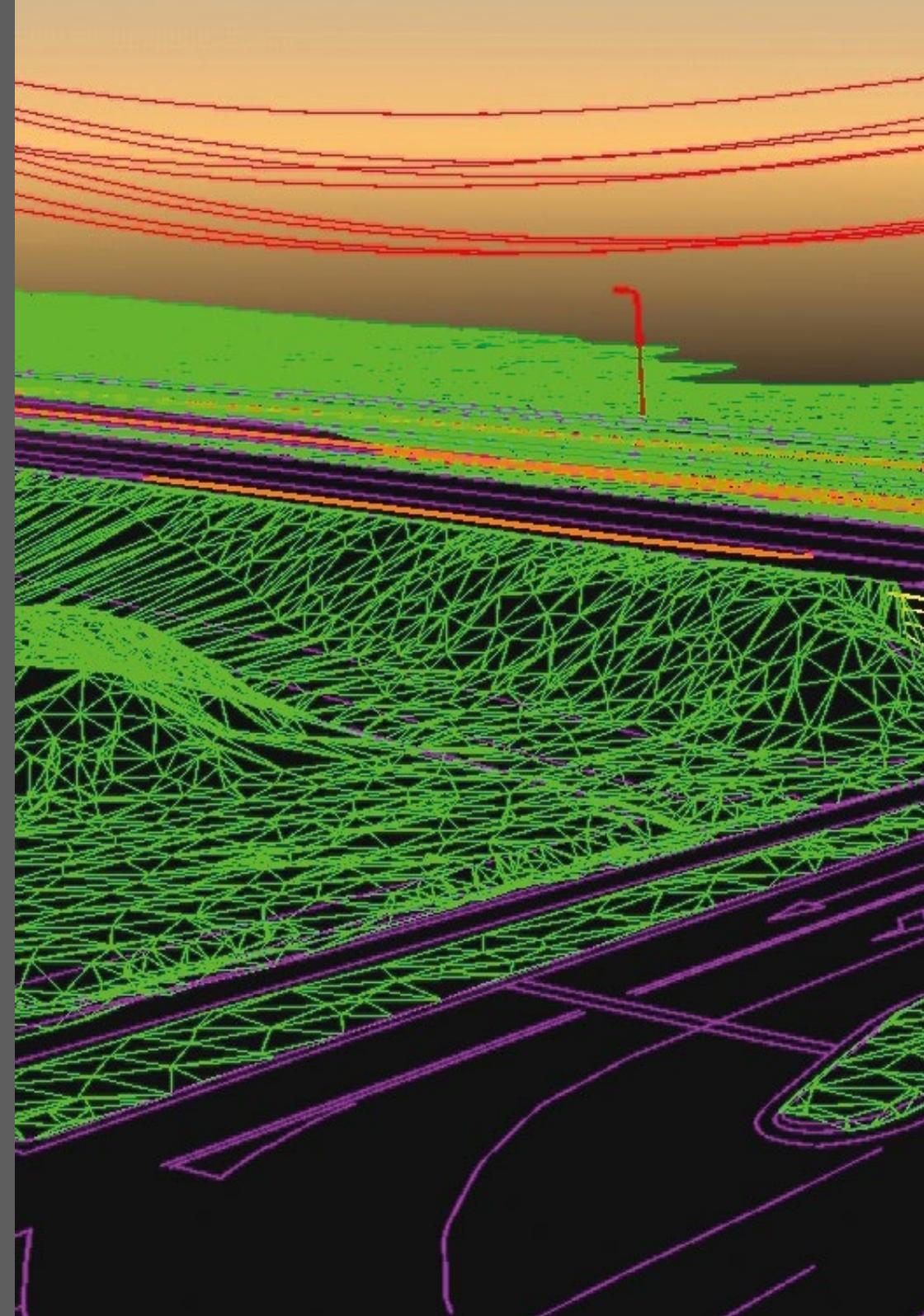
To help with the high demand of their highways projects, a post-processing software solution was needed to automatically identify the white lines and barriers on the roads and also round shaped objects. With working with a research organisation in The Netherlands, Geomaat achieved their goal and have increased their efficiency.

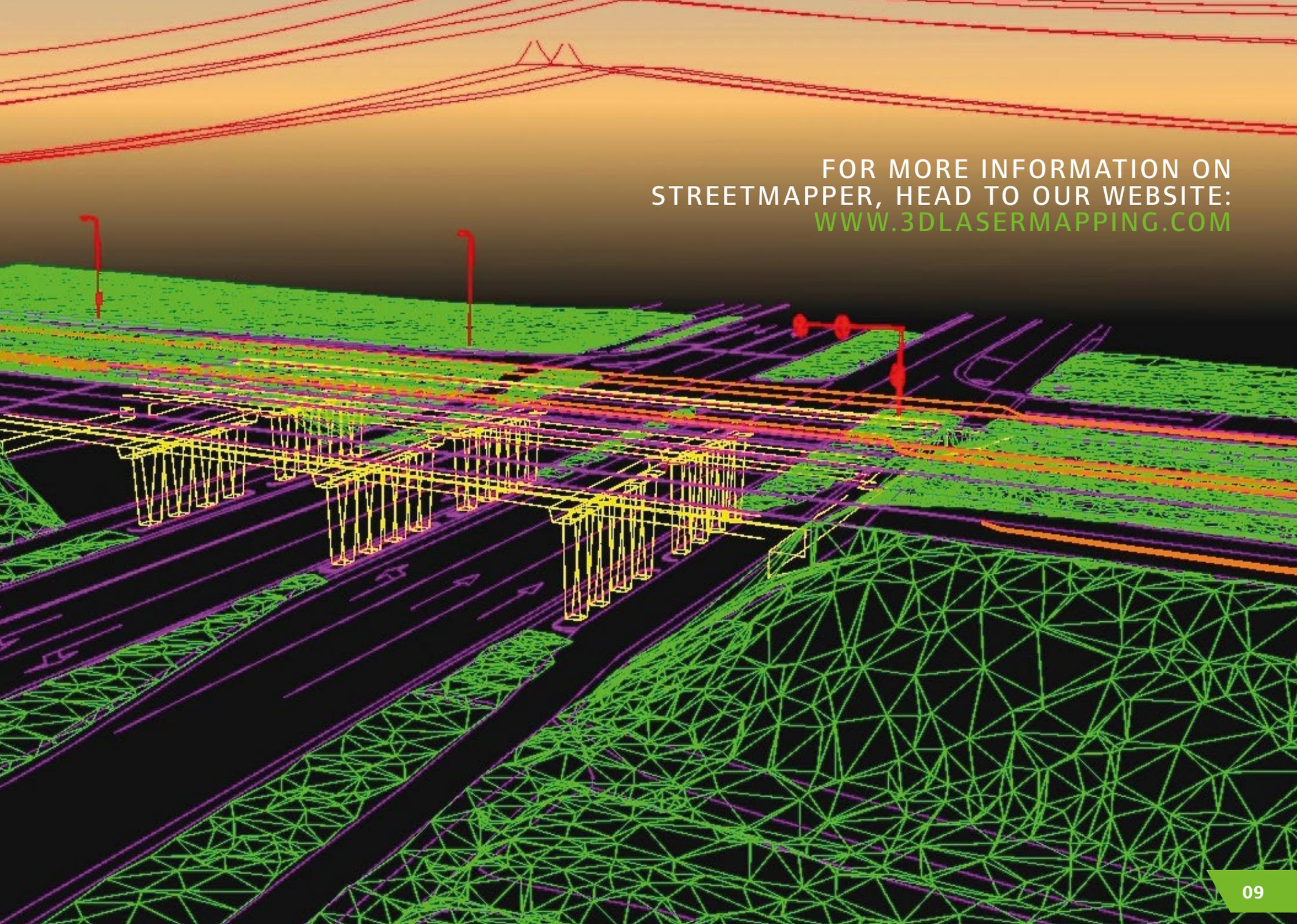


Since the purchase of StreetMapper in 2009, Geomaat has been putting it through its paces, with numerous rewards.

When asked to list the main benefits the system had brought to the company, it was noted that:

- It is 50% cheaper than traditional surveying methods
- Money was saved on staff overtime, reducing the need to work through the night.
- Staff safety was improved and disruption to road users was decreased as roads no longer need to be closed to perform highway surveys.
- The accuracy is greatly improved, with data given in both absolute and relative terms
- Once captured, the data can be used over again on future projects.
- The robust system need only be serviced every 2.5 years.





FOR MORE INFORMATION ON
STREETMAPPER, HEAD TO OUR WEBSITE:
WWW.3DLASERMAPPING.COM



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“ Buying a mobile mapping system from 3D Laser Mapping was a great decision - we have an amazing system that suits our needs perfectly and if you ever need any support - you always get an answer to your problem. ”

- Alfred Mulder, Mobile Mapping Manager at Geomaat



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