



YellowScan

Designed to Innovate.

SUCCESS STORY

Civil Engineering

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Customer support of YellowScan was incredibly good, they provided extremely valuable support to set up such a complex and large project.

Balint Vanek, PhD
CTO of Ventus-Tech

VENTUS  **TECH**

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UAV USED
DJI M600



SOLUTION
Surveyor

Business need.

We needed to capture raw data for complete geographical surveys of linear infrastructure in a safe and efficient way. The goal is to capture the present geographical state of a 47 km long highway segment with its supporting infrastructure (one of the busiest roads in Central Europe) to start designing the extension of the road from 2+2 lanes to 3+3 lanes.

The road should not be closed during the survey. The survey had to be done in the shortest time and document the present state in the highest detail, in case something has to be measured in the future. The engineering design of the road will be based on the data.

Finish the survey with the least interruption to traffic, in a shortest amount of time and document the present state in the highest detail, in case something has to be measured in the future.

Solution.

Our lightweight UAV Lidar, YellowScan Surveyor, enabled quick and easy collection of detailed data about topography of the surveyed area.



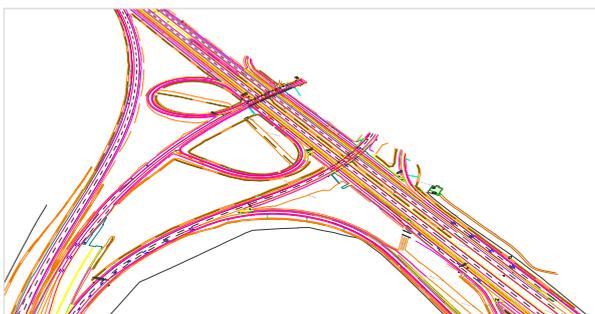
SUCCESS STORY

Results

« We aimed for 100 points/m² (10 pts/ft²), ideally >10 point/m² from the ground, ditches on the sides of the road are very important for drainage, where significant vegetation is present. We had to prove < 5cm (2") absolute accuracy due to volume of Earthworks. Vectorization of present state is done using the combination of LIDAR and photogrammetric survey. The technology is developed by MindiGIS, partner in the project. »

Benefits.

The YellowScan Surveyor is truly a turnkey solution for such an advanced application. In case manual survey has to be done, the surveyors have to work during partial road closure, which is dangerous and costly. Due to the great amount of detail we can add items to the survey list in the office without going back to the field.



Road with surrounding infrastructure and terrain: geodesy for road reconstruction and extension

You want to learn more about this success story ?

Scan this QR CODE



YellowScan Surveyor, LiveStation and RGB camera on a M600 from DJI

Mission parameters.

- Number of flights: 88
- Area surveyed: 47 km corridor length in 30 days
- Flight speed: 5 m/s
- Flight altitude: 40 m AGL
- Software: UGCS, Pix4D, TopoDOT, Yellowscan QGIS module
- Add-on: Leica GNSS base station