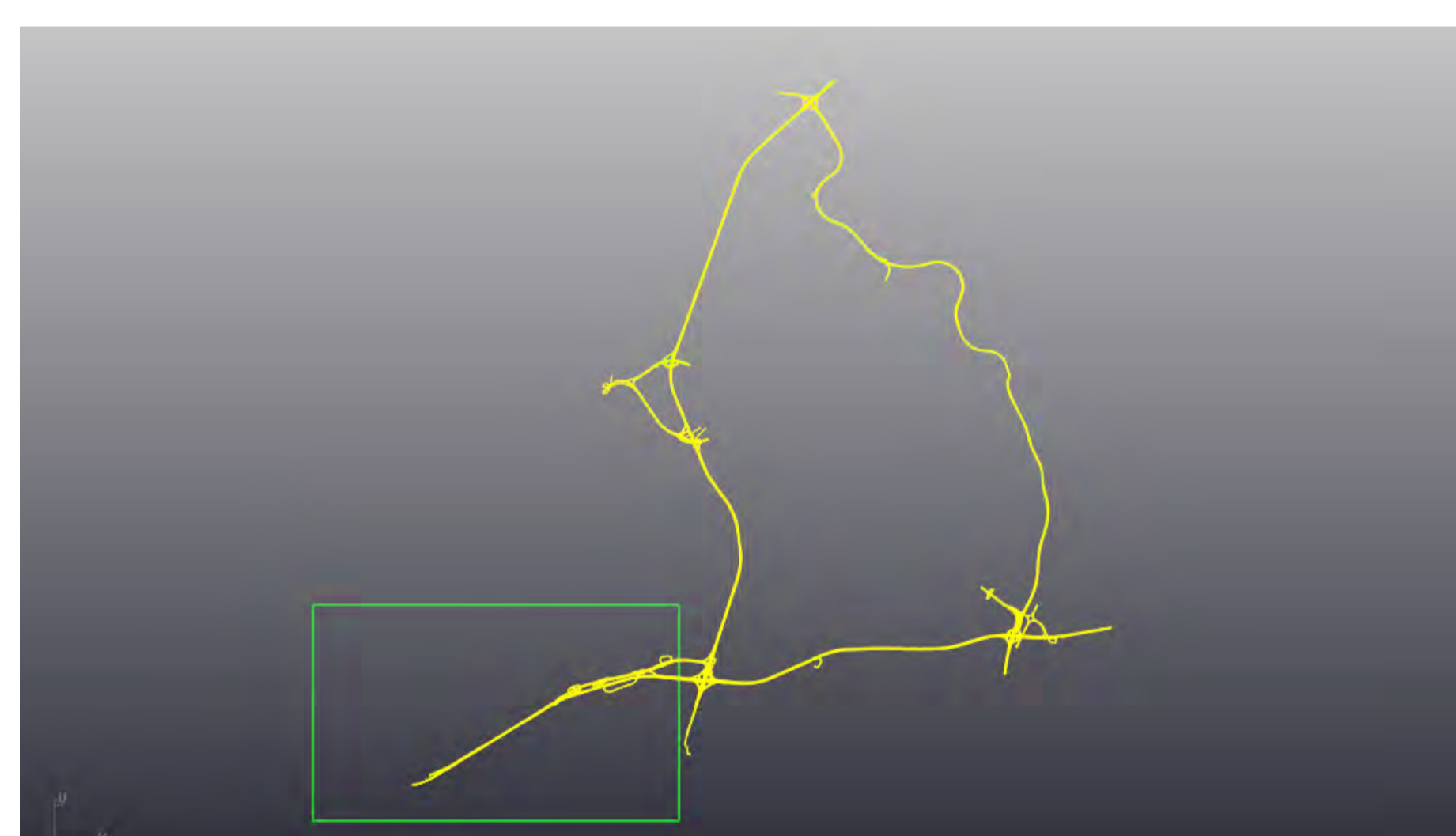
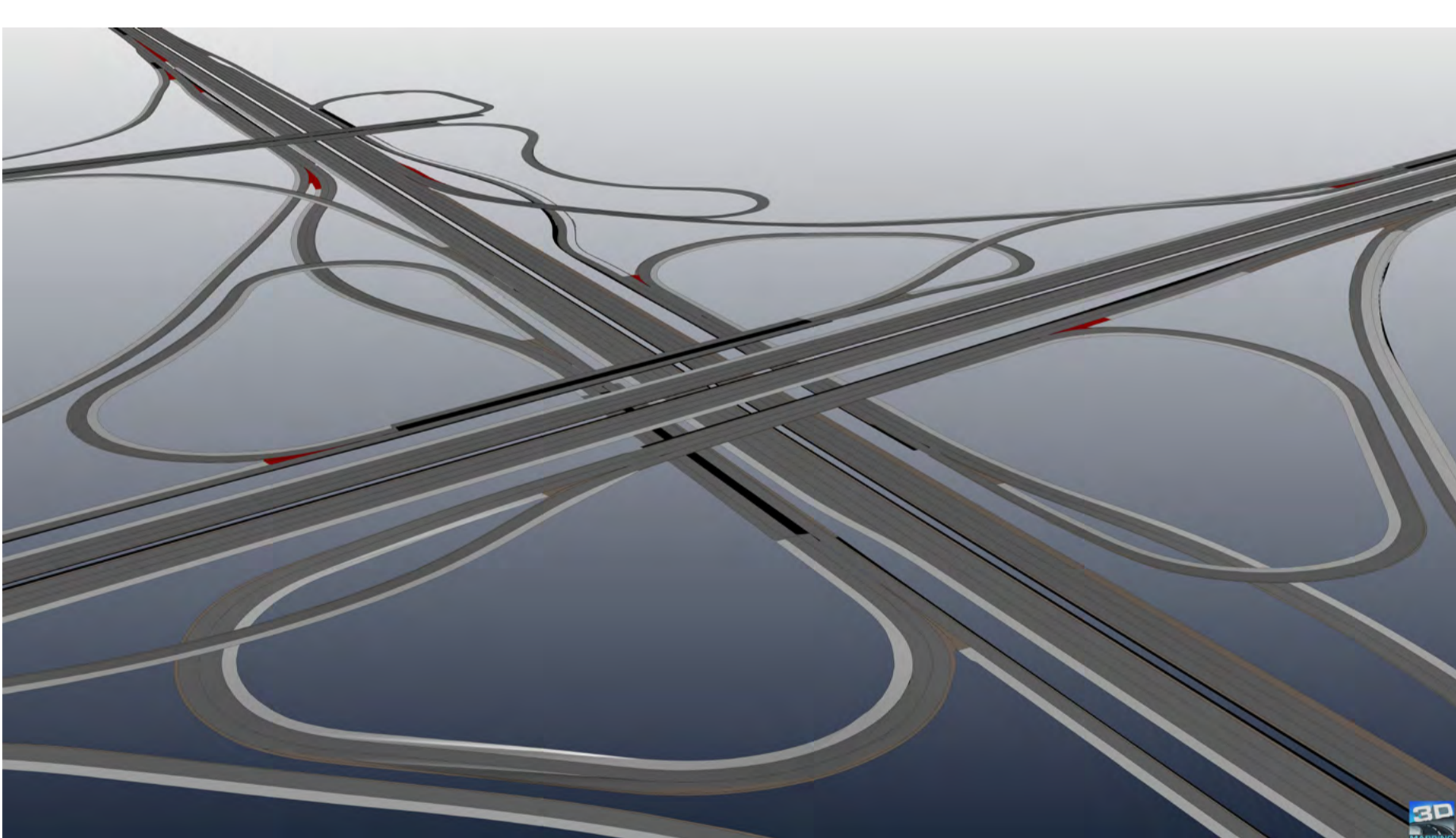


High Definition Reference Maps for Autonomous Driving



DELIVERED HIGH DEFINITION MAP FOR KO-HAF

- 275 km of HD Map data provided in OpenDRIVE 1.4H and ROAD5 for CarMaker by IPG Automotive. Including:
 - Elevation profile and superelevation
 - High-precision lane borders for all lanes (driving, stopping, entry, exit, restricted...)
 - Lane markings described by width and type
 - 24000 lane marking segments with explicit start and end positions (OpenDRIVE)
 - 364 motorway entries and exits
 - Speed Limits
 - 6200 road objects (trees, guide posts...)
 - 800 km of linear features (guard rails, concrete security barriers...)
 - More than 4000 traffic signs



OUR MULTISENSOR SURVEY SYSTEM

- High-precision, three-dimensional measurement of position and orientation
- High-resolution digitalization of the road corridor with:
 - Two high-end Laser-Scanners, each with
 - At least 1 million points per second
 - Precision of distance measurement < 0.5 mm per pixel
 - Maximum distance > 50 m with 360° field of view
 - Multi-Camera-System with 4-12 calibrated cameras

