

Monitoring Highway N210 Krimpen aan den IJssel, The Netherlands



Subject: Monitoring Highway N210
Project reference: 1407-0036-000
Location: Krimpen aan den IJssel, The Netherlands
Client: Ballast Nedam, IC plus E
Client type: Contractor
Period: 2007-2027
Turnover: € 191.000,-

Project description:

The local highway between Bergambacht and Krimpen aan den IJssel is being reconstructed. Because the bottom consists mainly out of a layer of 8 meter of peat, it has been decided to use an innovative foundation. A stretch of 14 kilometer of road will be constructed on top of poles. These poles are installed every 2.30 meters and will be covered with a geo textile and a geogrid. Because the length of the reconstruction Fugro have been asked to monitor a location of 50 meters during the building and the live cycle of the highway.

The poles are equipped with inclinometers and loadcells to measure the rotation en pressure. Between the poles are ground and water pressure cells installed. The geogrid and geo textile have been equipped with strain sensors. There are six permanent settlement hoses equipped with pressure sensors. All the instruments are buried under the road.

The reading are automatically send every 15 minutes to a logger unit on location. This logger communicates every 2 hours with the Fugro head office and sends the data to the server. Than the data is processed with a special made on-line program so that is accessible for the users. The users can analyze the data and make their own graphs. In the same program the predictions can be shown to compare it with the actual readings.

