Press release

Date 27 april 2020
Time 10.31

Heijmans/Siemens Mobility combination to renovate Piet Hein Tunnel

The Heijmans/Siemens Mobility combination will be renovating the Piet Hein Tunnel in Amsterdam. The contract issued by the Municipality of Amsterdam is valued at approximately €70 million.

The Piet Hein Tunnel was commissioned in 1997 and is a main route in Amsterdam's road network. The Piet Hein Tunnel connects the centre of Amsterdam with the Zeeburger Island and the A10 motorway ring road. After more than 20 years of intensive use (30,000 vehicles per day), the tunnel is due for a thorough renovation.

Activities
Due to this intensive use, the tunnel's civil engineering and structural works require a major overhaul. In addition, the tunnel's technical installations and systems, and their operation, have reached the end of their technical service life and must be replaced. Furthermore, the renovation is needed to comply with the new tunnel safety legislation of the Road Tunnel Safety (Additional Rules) Act (Tunnel Act).

Alliance
Heijmans and Siemens Mobility together with the Municipality of Amsterdam form an alliance for the design and the implementation phases. The renovation is scheduled to be completed by the middle of 2022.

This is not the first time Heijmans and Siemens Mobility have worked together. The combination successfully completed the renovation of the Koningstunnel in The Hague last year. By making use of new, digital techniques, they succeeded in opening the Koningstunnel to traffic six weeks earlier than planned. A 'digital twin' will also be used for the Piet Hein Tunnel. This is a digital version of the tunnel that allows a wide range of scenarios to be simulated and tested.

Digital Twin
An interactive digital twin will be used in support of the construction of the Piet Hein Tunnel. This is a 3D model of the tunnel, including all new installations and the tunnel's surroundings. The digital twin will be linked to the new tunnel control software and the new tunnel operating and monitoring control room. The digital twin makes it possible to very accurately simulate a wide range of renovation scenarios in the tunnel and to test the renovated tunnel's functional behaviour. This reduces costs, shortens the elapsed time and increases efficiency.