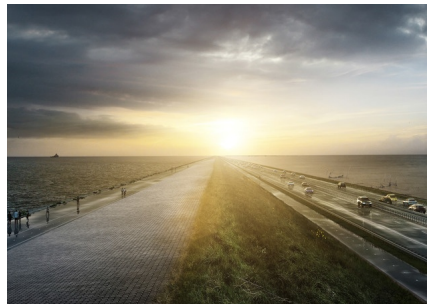


# THE NEW AFSLUITDIJK

2017 ongoing, Afsluitdijk, Netherlands



## Reinforcement of the Afsluitdijk

On the Wadden Sea side, the causeway will be raised and reinforced with new facing. For this work, the consortium will use 'Levvel blocks', innovative concrete elements that have been developed specially for the Afsluitdijk. Each block weighs about 6,500 kg, is extremely strong, has a wave retardant effect, and is easy to install. Some 100 blocks a day will be produced by means of a fully automated process in the port of Harlingen and transported by ship to the causeway. A pontoon crane will then be used to position the blocks, 75,000 in all. Because of their symmetry and the regular way they are positioned, the blocks have a tranquil appearance that reinforces the austere and autonomous character of the causeway. To protect the hinterland from the force of the water, the drainage locks will also be reinforced and two storm-surge barriers will be built.

## Gravity discharge if possible, pumping if necessary

The drainage locks at Den Oever will be expanded with new locks in between the island sections. This will allow more of the water that enters the IJsselmeer from the River IJssel to be discharged into the Wadden Sea. If the water level in the Wadden Sea is high, then natural drainage is no longer possible. Therefore, two large pumping stations will be built in Den Oever. The pumps will operate with very low energy consumption and are fish-friendly. They will be powered sustainably by 2.7 hectares of solar panels near Den Oever. With these measures the Afsluitdijk can again withstand the force of the water until at least 2050.

## A cutting for the fish migration river

In order to restore the connection between the Wadden Sea and the IJsselmeer for migratory fish, a fish migration river will be constructed by 'The

New Afsluitdijk', a partnership between the provinces of Friesland and Noord-Holland and the municipalities of Súdwest-Fryslân, Hollands Kroon, and Harlingen. This will be a 4 km channel surrounded by an ecological area accessible to visitors. Levvel will construct the necessary opening in the Afsluitdijk for the fish migration river.

### **Experience the Afsluitdijk**

The Afsluitdijk is a necessary construction, a protective barrier against the sea and a road link between two provinces. At the same time, it is a unique area much visited by tourists. To improve facilities for visitors, the New Afsluitdijk partnership has developed a number of initiatives. An additional cycle path will be built along the full length of the dike on the Wadden Sea side. The area around the striking monument designed by Willem Dudok will be upgraded and made more accessible to the public. The present pedestrian bridge will be relocated so as to reinforce the vertical character of the monument (a unique feature on the dike). At Kornwerderzand there a new walking trail will be added, allowing people to access the fish migration river.

More info can be found on the official [website of The New Afsluitdijk](#).

#### **client**

Rijkswaterstaat

#### **partners**

Levvel (a joint venture of Van Oord, BAM and Rebel), Benthem Crouwel Architects

#### **team**

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