



Design bank revetments “Watertorenterrein”, Dordrecht

Where the rivers *Beneden Merwede*, *Noord* and *Oude Maas* flow together thirty hectares of former harbour/industrial area is being redeveloped into a new city centre area next to the old centre of Dordrecht: *De Stadswerven*.

For the realisation of the *Watertorenterrein*, a development zone around a former water tower, Svašek Hydraulics was asked to design the bank revetments. This included the determination of the design water levels, wave heights and currents.

Water levels are affected by river discharge and the tide from the North Sea. The design wave heights are generated by wind and / or passing vessels. With the numerical model WAQUA design currents are determined during maximum flood and maximum ebb in combination with a river discharge at Lobith of 16,000m³/s and a water level at Hook of Holland of +2.0m NAP.

The under water bank revetment is designed as a rubble mound slope. The revetment above the water line is designed as granite columns in combination with grass.

The top left figure shows the situation before the realisation of the development plan. Beneath this figure a sketch of the plan is given. The photo at the right side shows the new constructed bank revetment and the water tower (built in 1882).

Client

Municipal of Dordrecht

Location

Dordrecht, the Netherlands

Date

2006

Services

Design bank revetments and determination of hydraulic design criteria

Svašek Hydraulics

Schiehaven 13G, P.O. Box 91, 3000 AB Rotterdam, The Netherlands.
Phone +31 10 467 13 61, Fax +31 10 467 45 59, Internet: www.svasek.com, E-mail: info@svasek.com

SV1406