



Feasibility study Katwijk Marina

Katwijk Marina is projected just north of the outfall of river 'Oude Rijn' and includes a harbour basin and a housing project. The discharge channel will be located within the breakwaters of the marina to improve the water quality at the beaches. The Marina will accommodate berths for 650 yachts and some fishing boats. Also a mooring place for the lifeboat of the KNRM (rescue at sea) is foreseen.

The breakwaters will give shelter to the Marina and the new to build houses and apartments at the landside of the Marina. The breakwaters are designed to withstand 1/10,000 year storm conditions to ensure the safety of the houses. In the design a sea level rise of 60 cm is applied.

To prevent large quantities of siltation at the harbour entrance, the southern breakwater is extended to a depth of NAP-6m. Both at the north and south side of Katwijk Marina the beach will be extended some 100 meters in seaward direction. The beach widening will finally extend over some 1000 meters at the south side and approximately over 500 meters at the north side.

The entrance of the Marina is designed in such a way that offshore waves can hardly penetrate the harbour basin. A HARES wave penetration study is executed to optimise the entrance layout in this respect.

Svašek Hydraulics was involved in the layout study, the preliminary design of the breakwaters and cost estimates, and performed the HARES wave penetration study.

Client
Fundex b.v.

Location
Katwijk, the Netherlands

Date
2008-2009

Services
Preliminary design breakwaters
and cost estimate Katwijk Marina,
wave penetration study (HARES)