



Port of  
Rotterdam

# Newsletter

Number 3 - August 2010, Volume 6

PROJECT ORGANIZATION  
**MAASVLAKTE 2**

BUILDING UP THE HARD SEAWALL

## BLUE BLOCK BEHEMOTH GETTING READY

The Blockbuster has been making a big impression on the Maasvlakte in recent months. In the autumn, this specially-designed crane will place the first huge blocks in the Maasvlakte seawall. Testing is underway and the operators are practising with the new crane.



### MONITOR THROWS LIGHT ON STUDIES

What are the effects of Maasvlakte 2's construction on nature and the environment? Are there any effects now that sand is being built up and new land lies off the coast? *(read further on page 2)*

The biggest blocks in the coming hard seawall are concrete blocks weighing 40 tons. About 20,000 of these are needed. They will come from the existing block dam, the present Maasvlakte seawall. A floating crane (backhoe) is lifting the blocks out of the sea with a ripper tooth. They are being stored temporarily. The Blockbuster will soon start placing the blocks in the sea

about 50 metres away from the fixed wall. They will serve as a breakwater in front of the stony dunes. In this way, the Maasvlakte seawall will be able to withstand the most severe storms, those that may arise once in 10,000 years. Although its size might suggest otherwise, the Blockbuster will be delivering precision work. The blocks will be placed to an accuracy of 15 centimetres.

With its 50 metre boom and jib, the Blockbuster can easily shift 40 tons.

Acoustic cameras will determine the exact position of the blocks under water. In this way, they can be built up in a particular way and the block dam will be extra strong. ■



## MONITOR THROWS LIGHT ON STUDIES (continuation page 1)

### What are the effects of Maasvlakte 2's construction on nature and the environment?

This is what the Port of Rotterdam Authority and permit-issuing authorities such as Rijkswaterstaat (Public Works) would dearly like to know. For this reason, the Port Authority is carrying out an extensive investigation programme. For those who do not want to have to study a thick pile of reports, there is now the Maasvlakte 2 Monitor on the construction - an accessible summary that reports clearly how and why the investigation is done, and what the initial results are.

Life in and on the seabed is kept under surveillance. It is checked that the cockles are not short of food. The amount of silt in the seawater is measured continually and so the Monitor provides more insight into a whole series of other studies and measurements.

**The Monitor is available via the website and in the FutureLand information centre** ■

## WORKING AT THE RIGHT DEPTH

### SPOTTED: CUTTER SUCTION DREDGERS

Besides the many trailing suction hopper dredgers already seen on Maasvlakte 2, two cutter suction dredgers are now at work. These special vessels 'cut' the soil under water free with a rotating cutter head, suck it up, and pump it to the right destination via a pipeline (floating as well as over land).

This cutting free is necessary when the soil is well compacted. For the sand that is extracted for Maasvlakte 2 from the sand extraction area in the North Sea, it is not needed. There, the

trailing suction hopper dredgers are in their element.

In the near future, 530 hectares of port basin must be deepened to about seventeen metres below

Maasvlakte 2, July 2010

Normal Amsterdam Water Level (NAP). Later, the docks will be further deepened to 20 metres below NAP. To achieve this, the cutter suction dredgers will shift around 30 million m<sup>3</sup> of spoil from the docks to the future port sites. ■



'De Edax' has been deepening the future Prinses Amaliahaven from June until August.



Cutter suction dredger 'Zuiderklip' dredges the block dam free.

## FEYENOORD MEETS THE PORT 2010

This summer Feyenoord's first team came to see with their own eyes how the Rotterdam port is growing. The team started their site visit to the new land from the FutureLand information centre. There was an obstacle course ready with which the players' ball control skills could be tested. Sitting in the FutureLand Express,

players and staff received information about the work on the expansion of the Rotterdam port. 'Very impressive,' was trainer Mario Been's reaction after the visit. 'Very good too that this kind of project is carried out, for the economy and for our children.'



## NOW EVEN GREENER

It's not a future golf course, it's sand newly deposited on Maasvlakte 2. And it would be great if this sand did not blow away. First of all, the surrounding area would find it a nuisance. Then, if a lot of sand were blown away by strong winds, extra sand would have to be applied to reach Maasvlakte 2's planned ground level. The solution here is as simple as it's typically Dutch - let grass grow.

To this end, contractor PUMA has had grass sown on trial plots on parts of the new Maasvlakte. One plot with the mixture familiar to those in the know, the Europort mixture, one with clippings from the present Maasvlakte, and a reference plot. Besides grass seed, the clippings also contain weed seeds; the reference plot was not seeded. The idea of sowing grass is that its roots bind the sand together. Whether the plot looks nice and green is of secondary importance. It is known that the Europort mixture gives a

good result. The aim of this test is to discover whether clippings give a result that is comparably firm and sand-retaining and also yields a more varied vegetation. This will be weighed up after the summer of 2011. Until that time, gauging poles will be used to measure how much sand blows away out of the plots. Once the outcomes are clear, the winning mixture can be sown on the new Maasvlakte. The inner berm behind the new row of dunes for example must be covered with this, while built-up sites where no building activity is yet underway can be temporarily greened over.



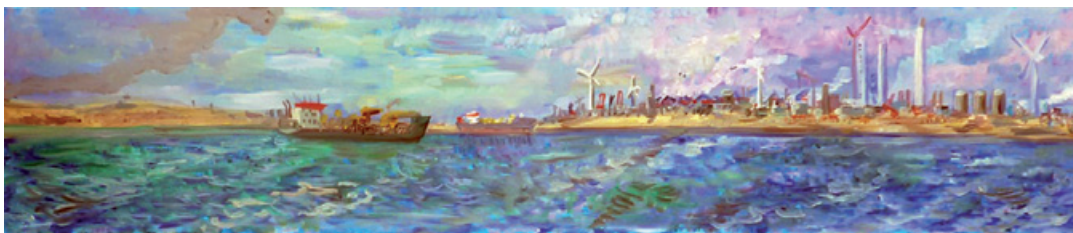
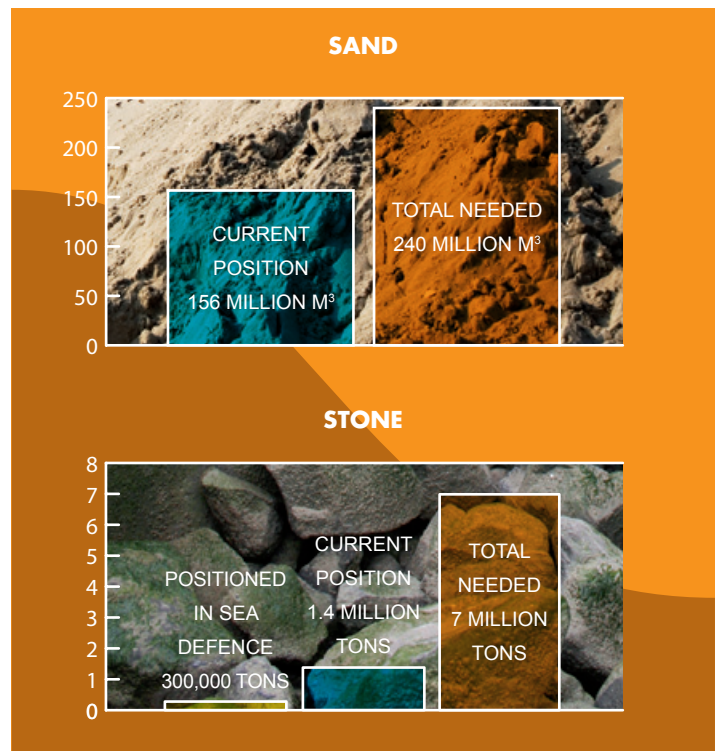
## MAASVLAKTE 2: PRESENT POSITION

### THE STATE OF THE SAND

Around 240 million m<sup>3</sup> of sand is needed to construct the first phase of Maasvlakte 2. At its peak, about 3 million m<sup>3</sup> of sand a week was being shifted, while it's now a little less hectic with over 1 million m<sup>3</sup> a week. That's what you would achieve if every inhabitant of the Netherlands brought along six buckets of sand every week. At the beginning of August 2010, the meter was at **156 million m<sup>3</sup>** of sand added.

### THE STATE OF THE STONE

Nearly 300,000 tons of stone is already in position in the future hard sea defence. Ultimately, 5 million tons of newly extracted quarystone will end up in the new hard seawall, along with 2 million tons of quarystone from the present sea defences that can be reused. Every fortnight, 90,000 tons of stone is discharged at contractor PUMA's door. Halfway through July, the meter showed **1.4 million tons** of stone delivered. ■



## WIDE VIEW OF MAASVLAKTE 2

A group of international artists is capturing the Dutch coast from the sea. Before it's too late, because due to coastal reinforcement, the appearance of the coast is going to change in the future.

It was the Maasvlakte's turn recently. The artists made panoramic paintings from ships lying some distance off the coast. The XXL Art

Foundation put together an exhibition that can currently be seen in FutureLand. 36 Netherlands coastal locations have been

MV2 by Jurriaan van Hall, oil on canvas, 50 x 250 cm

recorded so that the current appearance is preserved for the future. In recent months, it was the coast off and around the mouth of the Maas, including Maasvlakte 2 in construction. Six panoramas (canvases of 50 x 250 cm) may be seen in FutureLand. During the exhibition, you can also read writer

Dirk van Weelden's landscape portrait of his voyage on the Stella Bel off the coast of the Maasvlakte, together with two of the painters. He wrote it for one of broadcaster LLink's programmes, 'Van Weelden on Water'. This programme can also be watched at FutureLand. The exhibition 'Coastal art constructions: panoramas of Maasvlakte 2' can be seen in the YangtzeZaal at FutureLand from 28 August until 14 October 2010. The panoramic paintings are for sale, but must remain available for provincial and national exhibitions. The Ku[n]stwerken (coastal art constructions) project may be followed on: [www.xxlart.com](http://www.xxlart.com) ■

## PARALLEL BUILDING FLOWS

We have now been busy on the expansion of the Rotterdam port for two years. More than twenty trailing suction hopper dredgers have been depositing their cargo of sand day and night on the bed of the North Sea. Cutter suction dredgers have been making their contribution from the depths of the docks. Anyone who has come to FutureLand recently to look at the work has been able to see that the Netherlands is getting bigger.

### NEW BOUNDARY

The boundary between land and water has been shifted by 3,5 kilometres. In between lie sand surfaces that are being worked on all out. Visibly and invisibly all work flows are now in operation. Besides laying down inconceivable amounts of sand, special vessels are depositing enormous amounts of gravel, pebbles, stones and boulders. The stone company that is working in parallel with the sand company is making sure that the hard sea defence will soon be fit for its job above and below water: keeping out the swirling seawater, even in extreme weather conditions. New quay walls are being created from steel and concrete on and in the new sand. Over 680 metres of quay has been put in place. New roads and railway lines have been off the drawing board for some time. For example, this autumn, work will start on the new access to Maasvlakte 2. So we are definitely not lazing around

realising a major chunk of the future of the port. It wouldn't be possible anyway because we have made agreements: with lessees, banks, licensing authorities, managers, stakeholders and the political world. The idea was to give the economy an impulse, and also the living environment in Rijnmond. This is our commission and it remains our aim.

### SHARED AIM

I can see that we are fulfilling this agreement. Many lines converge on my desk, every day anew. The world economy that is climbing out of its dip helps, and the jointly-made agreements contribute too. Interest groups follow our progress critically and make constructive suggestions. No one wants to lose sight of our aim. Next year we will experience the peak of all these parallel activities. The Port Authority will invest almost half a billion euros in the project in 2011. The years thereafter will also be busy because then the future terminal operators will start building up their businesses. So to keep it short, the expansion of the Rotterdam port is progressing at full speed and as planned. ■



**Ronald Paul**  
Managing Director,  
Project Organization  
Maasvlakte 2

## BUSINESS MEETINGS IN FUTURELAND

FutureLand, the information centre about Maasvlakte 2, is uniquely situated in the middle of the construction work.

An inspirational place to cast your eye over the future together with your colleagues and to see how the Netherlands is growing.

### VIP DECK

The VIP Deck is situated on FutureLand's top floor, with an impressive view over Maasvlakte 2 in construction. Very suitable for meetings, lunches, receptions, presentations and training courses. The VIP Deck provides space for up to 70 people and is equipped with state-of-the-art audiovisual facilities. FutureLand is straightforward to reach by car, with its own car park, and there is also a bus stop at the entrance.

### COMBINE YOUR MEETING WITH A TOUR OF THE NEW LAND

FutureLand Express brings you to the newest part of the Netherlands. You and your party make a tour of Maasvlakte 2, a dynamic building site that is not freely accessible to the public and yet can be seen from close by. The guide on board knows exactly what there is to see.

### GUIDED TOUR

When you hire the VIP Deck, a guided tour of the information centre with a tailor-made presentation about Maasvlakte 2 is included. Guided tours can also be booked separately.



### RESTAURANT AND TERRACE

FutureLand arranges tasteful culinary surprises during your meeting. Enjoy a drink and a bite to eat in the Eten + Drinken restaurant, or on the terrace in the sunshine.

### BOOKING

Please contact FutureLand for more information, prices and to book this unique location:

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### COLOPHON

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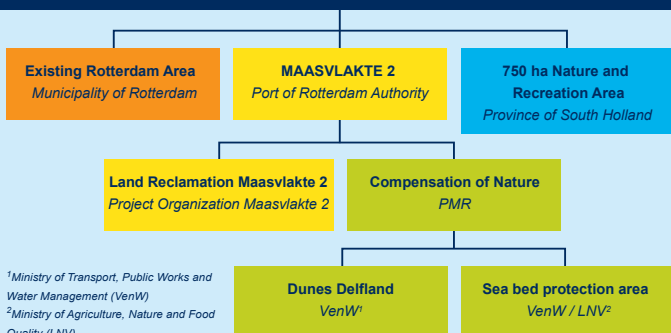
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### ROTTERDAM MAINPORT DEVELOPMENT PROJECT



The construction of the new port area, Maasvlakte 2, is part of the Rotterdam Mainport Development Project (PMR). The project also involves the nature compensation linked to the construction of Maasvlakte 2, the construction of a 750-hectare nature and recreation area, and the improvement of the Existing Rotterdam Area. PMR is a cooperative venture between the central and regional governments and the Port of Rotterdam Authority. See also [www.rijksoverheid.nl](http://www.rijksoverheid.nl)