



Princess Alexia Viaduct: from construction to utilisation

This newsletter already finds us well into 2026 — a year in which we will be building on the solid foundations laid in 2025. Over the past year, the contours of the Princess Alexia Viaduct have become increasingly visible: the reinforced ground for the slip roads has been laid, most of the pillars have been poured, the deck of the viaduct over the Maasvlakteweg has been poured, the prefab girders have been successfully placed over the railway, etc. The viaduct is really taking shape now.

In 2026, we will be focusing on completing and delivering the viaduct. An important milestone is now in sight, and we will of course keep you informed of all developments this year, as there is still a lot to do!



Prefab girders in place

During the weekend of 6 and 7 December 2025, the pre-cast pre-stressed concrete girders for the viaduct over the railway were successfully hoisted into place on the Princess Alexia Viaduct. This work took place during a so-called blueprint weekend: a train-free period during which train traffic on the port railway line was temporarily suspended completely. This enabled the works above the railway tracks to proceed safely and efficiently.



The project was carried out in close collaboration between BAM, Haitisma and Mammoet. The girders were hoisted into place one by one with the help of a large telescopic crane. These were impressive elements: 18 metres long, weighing over 15 tonnes and installed at regular intervals of approximately every 15 minutes. A total of 29 girders and 2 edge beams were installed — a precision job.

BAM deliberately opted for this construction method using prefab girders. A

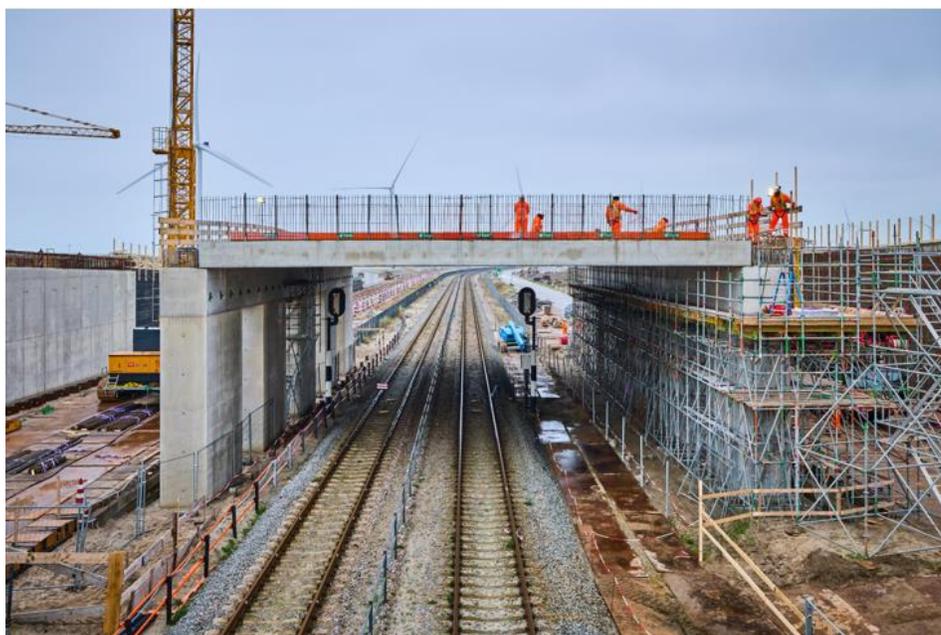
traditional construction method would require the track to be taken out of service for approximately ten weeks. However, this job, including the hoisting and all associated work, would be completed in just 20 hours. This minimised disruption to train services. In addition to saving time, this approach causes less disruption to the surrounding area.

After installing the beams, the concrete finishing work commenced. That takes about eight weeks. Work on the railway viaduct will continue until May 2026, after which the entire project is scheduled for completion in the fourth quarter of 2026.

First deck construction completed

On Saturday, 13 December 2025, an important milestone was reached in

the construction of the Princess Alexia Viaduct: the first deck over the Maasvlakteweg was successfully poured. No less than 1,400 m³ of GROENR concrete was used for this impressive operation — a more sustainable concrete mixture that contributes to reducing CO₂ emissions in the project.





The GROENR concrete was applied using concrete pumps with long booms, so that the entire deck was accessible without compromising traffic safety. The concrete was then carefully distributed and compacted with poker vibrators to prevent air pockets and ensure the deck is top grade.

Various preparations

preceded the pouring. The reinforcement, formwork and support structures had been fully prepared and checked in the preceding months. During pouring, a continuous supply of concrete mixers was used, which were scheduled according to a precisely coordinated logistics plan to maintain the concrete composition and workability.

The concrete pouring went smoothly and meticulously thanks to close cooperation between BAM Infra Nederland, ZHBC, Albeton, the concrete laboratory and all the teams involved in the execution. Traffic controllers also played an important role in ensuring that the work along the busy Maasvlakteweg proceeded safely and smoothly.

The conditions were ideal: the weather was exceptionally good for mid-December and provided perfect pouring conditions. And as if that were not enough, a DJ from ZHBC provided rousing music on the construction site, which contributed to an energetic and positive atmosphere during the long day of pouring concrete.



Pre-stressing the poured deck commences

The construction of the Princess Alexia Viaduct is reaching a technically important phase: the pre-stressing of the poured concrete deck. This phase is an essential step in achieving the final strength, rigidity and durability of the viaduct.

During the structural works phase, steel sleeves and pipes were installed in the deck. Tension rods have been inserted into these.



Once the poured concrete has sufficiently hardened, each strand is tensioned to the correct level using hydraulic jacks. This generates forces of many tonnes per strand. When the correct tension has been achieved, the strands are anchored. All values are then checked to confirm that the deck meets the design requirements. Once all the strands have been tensioned and the measurements have been approved, the channels are filled with a cement mixture (grout). This protects the strands against corrosion and permanently secures the forces in the concrete.

By pre-stressing the deck, the viaduct gains the strength it needs to safely carry future traffic loads.

Works in the first quarter of 2026

This quarter, we are working towards a new construction phase of the project. This involves working on the slip roads and the further construction of the viaduct. By adjusting the traffic situation, we are creating space for concrete pouring and reinforced soil layers.

In order to commence this phase change, we require a complete closure of the Maasvlakteweg from Friday 13 March, 19.00 hours until Monday 16 March, 05.00 hours.

We managed to combine many different activities during that weekend, such as laying the foundations for the widening towards the Princess Amalia Viaduct, installing the remaining fire-fighting pipes, masts and

cables for public lighting and asphalt at various locations, and putting traffic measures in place for Phase 3.

Additionally, we **require a complete closure of the left lane of the Maasvlakteweg (= towards Rotterdam) from Friday 20 March at 19.00 hours until Monday 23 March at 05.00 hours**. We will then be asphaltting the widening towards the Princess Alexia Viaduct, among other things.

In the meantime, without the necessary closures, we are carrying out various works on the future slip roads, such as continuing to build the reinforced ground structure, constructing the road structure and asphaltting. We are also continuing to construct the future cycle path.

‘Dag van de Bouw’: visit the Princess Alexia Viaduct - Saturday 20 June

On Saturday 20 June, the Princess Alexia Viaduct will open its doors to the public during the national ‘Dag van de Bouw’. An excellent opportunity to discover up close how this impressive infrastructure project is taking shape!

During this special day, we will take you behind the scenes of the construction site. You will have the opportunity to view the viaduct from the inside, including informative tours of the construction site, fun activities for children, and meeting members of the project team from BAM and the Port Authority. They will be happy to tell you all about the technology, planning and challenges.

DAG VAN DE BOUW



Project Maasvlakte-Zuid railway yard (EMZ)

Portlantis - Photo: Robin Utrecht

Make it a complete day out at Maasvlakte by combining your visit to the project with a ‘Dag van de Bouw’ open day at the [Maasvlakte Zuid Railway Yard \(EMZ\)](#) — construction of the first bundle of six sidings suitable for 740-metre trains — or a tour of Portlantis, the new port experience centre where young and old can learn more about the port, technology and the future.

So make a note of the date in your diary! We will share the full programme and exact times in due course in the next newsletter and on the project website: [Princess Alexia Viaduct | Port Of Rotterdam](#).

We look forward to welcoming you!

Iconic dune viaducts on the Maasvlakte: Princess Alexia Viaduct continues the design tradition

The Maasvlakte has been known for years for its characteristic dune viaducts — remarkable works of art in which infrastructure and landscape merge seamlessly. The striking, sculptural designs by Zwarts & Jansma Architects give a visual impression to the area that is instantly recognisable. The

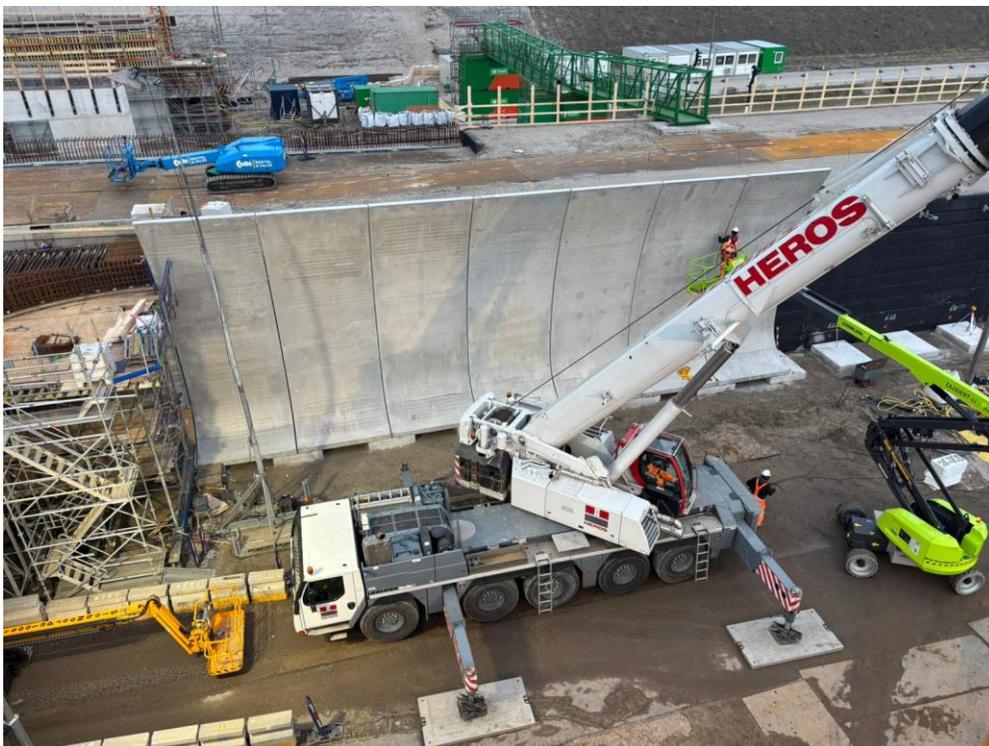


Princess Máxima Viaduct and the Princess Amalia Viaduct had already been built in this style, both of which have since become icons in the landscape of the port.

This architectural trend is also pursued at the Princess Alexia Viaduct. The design echoes the dune-like shapes and natural movements of the surroundings: gentle curves, flowing lines and a design language reminiscent of shifting dunes. This makes the viaduct not only a functional transport hub, but also a great aesthetic addition to the Maasvlakte.

Precision work: the first facing walls installed

An important step in the construction process has now been taken: the first facing walls have been fitted. These elements form the visible shell of the viaduct and largely determine its final appearance.



Installing them is an impressive feat of precision work. No two panels are identical: each element has its own shape, size and specific position in the overall sequence. Fitting is therefore carried out according to a precisely planned installation schedule, in which precision work and tight logistical planning are essential.

A special lifting structure, previously developed for the installation of elements on the Princess Amalia Viaduct, will be

used. This construction makes it possible to manoeuvre each panel into exactly the right position and orientation. We are using this system again for the Alexia Viaduct in order to carry out the complex assembly efficiently and safely.

A recognisable, sustainable identity

The Alexia Viaduct further expands the family of dune viaducts on the Maasvlakte. By adhering to the same design principles, a coherent series of artworks with a clear identity is created — robust, elegant and firmly anchored in the landscape.

In the coming months, more and more elements of the architecture will become visible, while construction of the viaduct steadily progresses towards completion in 2026.





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Princess Alexia Viaduct in GWW infrastructure magazine (Dutch)

The Princess Alexia Viaduct project is under the spotlight! The magazine GWW Bouwmat, which covers civil engineering, underground infrastructure, energy, construction equipment and construction machinery, devotes no less than 26 pages to this impressive work. It contains general articles about the project, but also discusses specific aspects: the pile systems for the foundation, screw piles, reinforced soil structures, the cycle path, low-emission construction, concrete cooling, the auxiliary structure for the bridge deck, the seamless transitions, pre-stressing, sewerage, rainwater drainage and the road infrastructure.

[See GWW Bouwmat magazine here \(Dutch\) >](#)

How can I stay informed?

- **General number:** 088 7123 505. This number is available 24/7 for questions and reports.
- **For general information about the project:** Linda Vervooren, Environment Manager, Port of Rotterdam Authority, +31 (0)6 16 58 84 69 / l.vervooren@portofrotterdam.com
- **Emergencies:** call 112.

On portofrotterdam.com/en/building-port/ongoing-projects/prinse-alexia-viaduct we provide information about the project up until completion. Visitors can also subscribe to the newsletter there, which contains additional updates about the project.

Feel free to refer anyone who might be interested to the option to sign up for this newsletter.