



MAKING A MATERIAL
DIFFERENCE

MEETING DOCKSIDE DEMANDS WITH A HEAVY-DUTY ASPHALT SOLUTION

Delivering over 14,000 tonnes of heavy-duty asphalt to create a durable surface for Birkenhead Docks' expanded trailer park.



OVER 14,000 TONNES
OF MATERIAL
DELIVERED



HEAVY-DUTY
MATERIAL
SUPPLIED



DEDICATED TECHNICAL
EXPERTISE AND
SUPPORT

ASPHALT

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MEETING DOCKSIDE DEMANDS WITH A HEAVY-DUTY ASPHALT SOLUTION

Breedon was appointed by **Jones Bros Ruthin (Civil Engineering) Ltd**, working on behalf of Stena Line Ltd, to support the expansion of its 12 Quays Terminal in Birkenhead. The expansion involved creating two new trailer parks and approximately 200 additional parking spaces to strengthen operations. With freight volumes increasing, the project was critical to improving traffic flow and futureproofing the terminal.

Built on an old infilled dock, the project site required a specialist surfacing solution capable of withstanding heavy loads while accommodating potential ground movement. Working closely with the wider project team, including Miles Macadam, we delivered over 14,000 tonnes of highly durable material, tailored to the demands of a busy port environment.

Project Requirements

While concrete would typically be specified for this type of heavy-duty application, the site's challenging ground conditions and project programme made this unsuitable. Constructed on a former dock, asphalt offered a more flexible solution capable of accommodating potential ground movement without compromising structural integrity.

In addition to durability and increased flexibility, the surface needed to be fuel resistant and able to withstand the stresses of static and slow moving heavy vehicles. All materials were therefore required to meet stringent technical standards and undergo a rigorous approval process to ensure long-term performance.

Our Solution

To meet the demanding performance requirements, we supplied a multi-layered asphalt solution designed to deliver both strength and flexibility.

To create a strong foundation we delivered **over 11,800 tonnes of EME2 as the base and binder course**. This high modulus asphalt, produced using a low-penetration binder, provides the structural strength needed to create a robust platform while retaining the required flexibility.

For the surface course, we worked in partnership with Miles Macadam to supply **1,088 tonnes of Hardipave™**, a BBA HAPAS approved grouted macadam specifically engineered for heavy-duty applications. Combining the flexibility of asphalt with the

strength and fuel resistance of concrete, Hardipave™ provided a jointless, high performance surface ideally suited to areas subject to static and slow moving heavy vehicles.

Due to the stiffness of the 15/25 penetration bitumen in the EME2 we only had a short working window from mixing to laying. We implemented a continuous truck rotation system to maintain a steady flow of freshly mixed material from plant to site, minimising delays and retaining product performance.

Our technical team obtained mix designs from Jean Lefebvre (UK) Limited for the EME2 material and worked alongside Miles Macadam to produce the Hardipave™ receiving course, with all aggregates sourced from our Minffordd quarry. All material was batched at our Liverpool asphalt plant, with Wrexham plant on standby to ensure a reliable supply.

In total, we supplied over 14,000 **tonnes of material across multiple** phases between October – November 2024 and February – March 2025, achieving average daily deliveries of around 500 tonnes. The EME2 base and binder course and Hardipave™ surface course were laid by Jones Bros Ruthin (Civil Engineering) Ltd.

By combining advanced materials, technical expertise, and carefully coordinated logistics, we supported the delivery of a durable, fuel resistant surface built to perform under sustained heavy use.

“Breedon’s technical expertise from the early stages of the project was instrumental to the successful delivery of the trailer park. The team provided detailed technical data and bespoke mix designs, supported the test panel process, and ensured the timely supply of materials for the main works.”

GWYNDAF REES
JONES BROS RUTHIN (CIVIL
ENGINEERING) LTD


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