

Manchester Airport - Stand 27 & Stand 63

Client:

Allied Infrastructure Management Limited

PQX Deep Pavement Reconstruction

Project Overview & Scope

Gill Civil delivered a full-depth pavement reconstruction of up to 800mm at Manchester Airport, covering approximately 85m² across Stand 63 (56.2m²) and Stand 27 (28.2m²). The works involved the excavation, breakout and complete reconstruction of multiple pavement layers down to formation level, incorporating specialist labour, plant and materials throughout. The stands were reinstated using a high-performance, fast-setting concrete with an established track record of successful use across the airport, providing a proven solution for demanding airside applications. This enabled both areas to be returned to full operational use efficiently and within the required programme.

Challenges and Execution

Delivering a deep pavement reconstruction within a live airside environment presented a significant technical challenge, with the depth and volume of the concrete pour creating a risk of thermal cracking. Careful planning and controlled placement were essential to maintain concrete quality and minimise thermal stresses during curing. Multiple volumetric concrete trucks were coordinated to discharge simultaneously, enabling a continuous, consistent pour within the available working window. Precise sequencing and close coordination ensured the works were delivered safely, efficiently and with minimal disruption to airport operations.

Benefits and Outcomes

The completed reconstruction restored the long-term structural performance and load-bearing capacity of both aircraft stands, providing a durable solution for continued airside operations. The use of proven fast-setting concrete, combined with simultaneous multi-truck placement, enabled efficient completion of the deep concrete pour while maintaining consistent quality. Embedded maturity sensors were used to monitor in-situ concrete temperature and strength development, supported by UKAS-accredited testing to verify compliance and curing performance. Careful planning and precise sequencing allowed the works to be delivered safely within restricted airside working windows, minimising operational disruption and meeting the required handback programme.

