

Main Runway Re-surfacing



Project Description & Background

Background

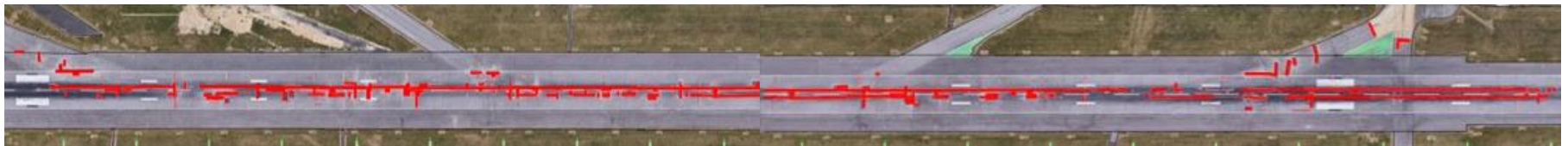
- **Gatwick's main runway was last fully resurfaced in 2012** with a design life of 9 years revised from the original 12 years during delivery.
- **There have been 4 surface failures** on the main runway between 2014 & 2020 resulting in runway closures.
- **Runway improvement work has been an annual intervention since 2016** in an attempt to rectify assessed risk areas, life extending the runway to this point
- **The main runway, our core asset is now beyond the design life expected** and has a failure rate which is exponentially increasing.

Delivery

- **In-lay solution** removing and relaying in the same night (between the runway edges) does not include the exits or shoulders.
- **CATIIIB reduced to CATI** with ILS (removal of the centre line, reducing decision height for pilots)
- **100m per night** delivery plan groves to be replaced in 72 hours,
- **Northern Runway Operations to allow Main Runway access window.** 19th April – 12th July 21:00 – 05:30L
- **60 x Shifts of re-surfacing** / extended hours repeatable process (15 contingency shifts in plan)



Current Condition - Visual



Impact of Failure

- 30 – 45 Minute for an unplanned switch to the Northern Runway (loss of 41 movements in peak hour)
- Restricted capacity of the Northern Runway (loss of 22 ATMS per hour in peak hour)
- Inability to use Northern runway in low cloud base / Low visibility conditions. Full Airport closure for low visibility averaging 4 -6 hours (loss of first wave 250 – 300 ATMs)
- Inability for the departure of certain wide body fleet or severe impact to weight impact passenger load factors and Cargo.

Stansted Airport delays over 'hole in runway'

© 13 August 2017



Travellers at London Stansted Airport have been hit by delays after the runway was closed for emergency repairs.

Passengers were told by crew members there was a hole on the landing strip.

The airport said its runway was closed between 17:30 and 18:10 BST on Sunday.

A total of 11 incoming flights were diverted to other hubs including Luton and East Midlands. The runway has since reopened and "flight operations are back to normal", the airport says.

Gatwick runway reopens after 'hole' causes closure

Airport's main runway was closed for several hours with flights diverted and delayed after discovery



▲ Gatwick's main runway was closed after a 'small indentation' was found. Photograph: Nick Ansell/PA

Press Association

Mon 5 Sep 2016 10:48 BST



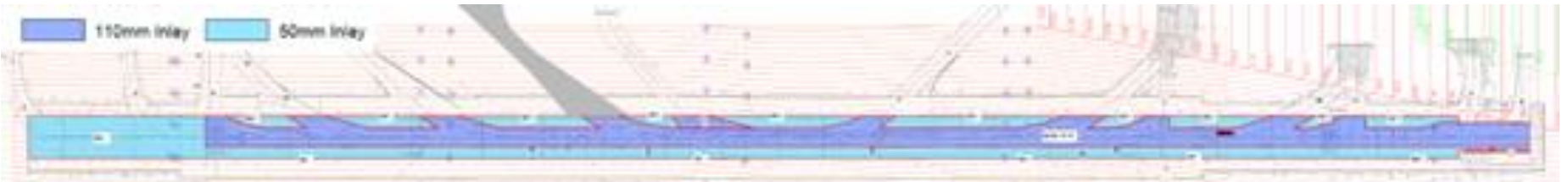
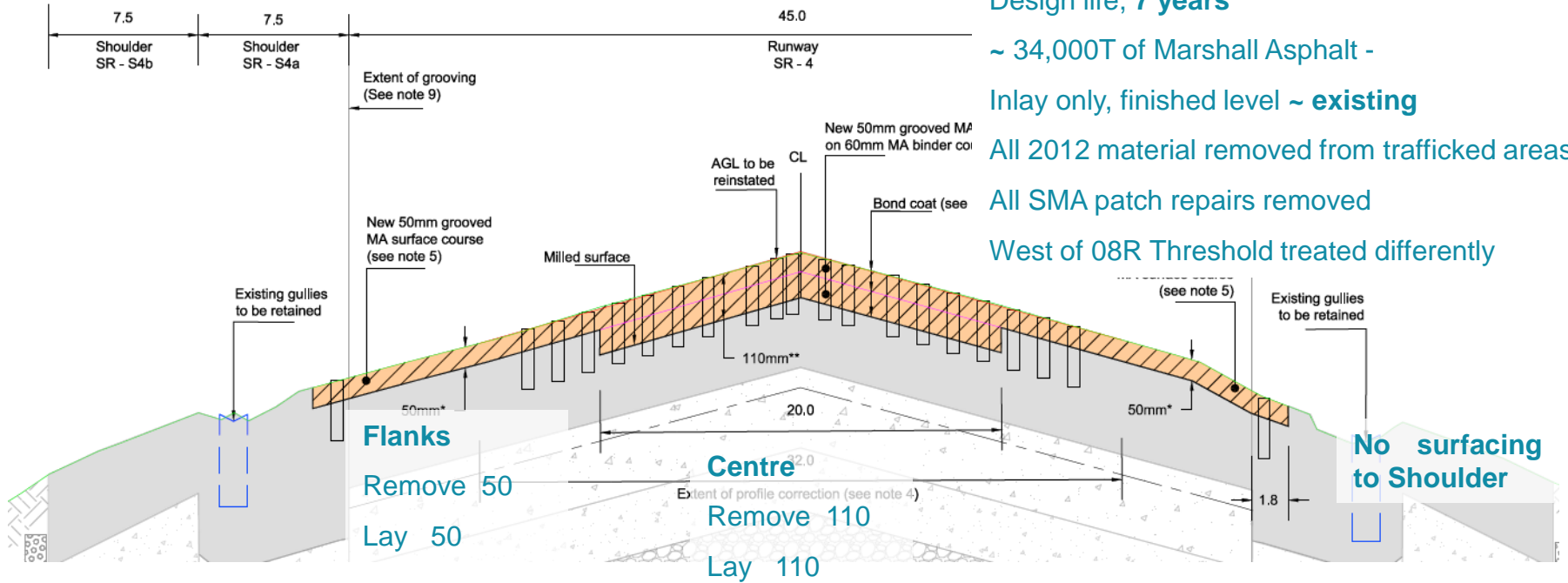
Gatwick's main runway has reopened after closing for several hours with flights being diverted and delayed.

Planes were forced to circle the skies above the West Sussex airport at 7.40pm on Sunday as a back-up runway was opened.

The problem was caused by a "hole" in the main runway, the Crawley News reported. An airport spokesman described it as a "small indentation".



'Interim Scheme' – 7 years design life



MRW – Logistics

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Gatwick

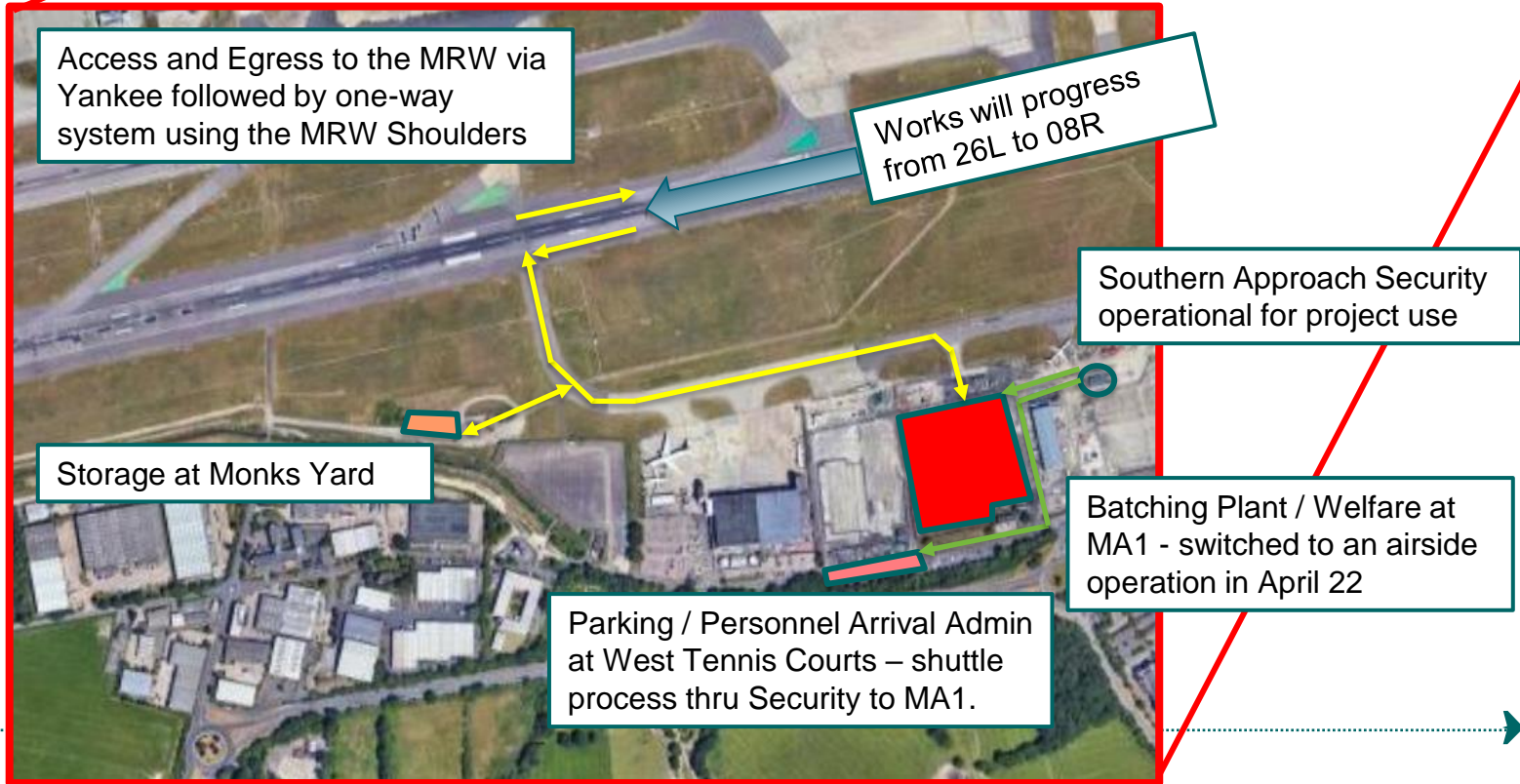
Logistics – c.30,000T of MA produced on site and laid on MRW in time limited possessions over 3 months.

- 2130-0530 Closure to target 100m of MRW
- Workforce of c150 personnel to get on / off MRW, est lighting and traffic mgmt.
- Equipment of c70x vehicles including up to 12+ 8-wheel 32T trucks, 22x artic's, 4 Pavers, 4 Planers and 10 rollers.
- Up to 4 Paving Gangs working in echelon.
- Over 50 loads of arisings removed from MRW in 2 hours - lorry load departs approx. every 2.5 minutes.
- Asphalt cooled, paint markings cured and MRW left FOD free ready for Aircraft.



MRW Resurfacing – Logistics Approach

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Operating principles

Safely deliver the runway resurfacing, delivering a high quality surface to the 7+ years design life, whilst minimising the impact on our airlines and passengers this summer.

Principles

- **Sunday to Thursday**, Northern runway Ops between **21:00 – 05:30 (GMT)** 19th April until 12th July. (to be extended due to program delays)
- Extra **weekend shifts** (Fri and Sat) working)22/23 April, 20/21 May, 10/11 & 24/25 June, 8/9 July)
- Northern runway capability 30ph first hour, 35 ph full hour (based on Code C mix) this is due to the runway occupancy and required spacing.
- 21:00 GMT switch critical for re-surfacing window. Delayed A380 beyond 21:00 GMT will need to night stop. (*only relevant 19th April until 4th May and 1st July onward)
- Weather criteria for no go decision is cloud base of viz over prob 30. If weather changes after 21:30 impact of weather will result in no runway available, resulting in divers.

