

# CASE STUDY

## CLIENT

Cambridge City Airport is situated close to Cambridge's historic centre and high-tech business parks, and is the ideal gateway to one of the UK's most famous and thriving cities.

Offering a full Charter and FBO Service, Hangarage and Parking facilities, 6000m<sup>2</sup>+ of modern, flexible hangar space, 10,000<sup>2</sup> acres of airfield parking, 1965 metre runway, and fully operational air traffic control service supported by a full suite of ground services – makes this airport one of the best equipped regional airports in the UK.

## WORKS COMPLETED

In September 2021, LAML was contracted by Marshall Aerospace Group to undertake a life extending asphalt preservation treatment to Charlie Taxiway. Our client was seeking a maintenance solution to extend the longevity and serviceable life of this vital asset for at least a further 5 years. All activities undertaken at the airport need to be minimally disruptive, able to be undertaken out of hours with minimal noise pollution.

The asphalt surface on this taxiway was in fairly sound condition apart from some minor cracking.

RHiNOPHALT®, HAPAS approved, asphalt preservation material was applied at an application rate of 0.5l/m<sup>2</sup> to approximately 11,000m<sup>2</sup> on the taxiway. Works were carried out in the daytime. The surface was dry swept with a road sweeper with plastic brushes immediately prior to the application to remove any detritus from the surface. Edges/reference points of the existing airfield markings were marked with tape and AGL on the taxiway were covered with protective tape in advance of the application.

The preservation application took approximately 4 hours to complete using a specialist spray application vehicle.

Once the RHiNOPHALT® had cured – after about 4 hours, all line marking was reinstated in the original locations with one pack epoxy paint.

Overbanding was carried out overnight in the same shift on areas of the taxiway where open cracks were visible following the preservation treatment.

The Taxiway was operational again less than 24 hours after works commencing.

## BENEFITS

A RHINOPHALT® treated surfaces become more resistant to abrasion, stone loss, and the severe ageing effects of ultra-violet light and water.

Asphalt preservation works by protecting the asphalt surface from weathering, oxidation, and traffic wear. RHINOPHALT® protects the existing surface course, specifically the bituminous binder and seals in existing oils and resins whilst at the same improving the binding and waterproofing properties of the surface. One application on older asphalt surfaces can extend pavement life by an additional 3 to 5 years, delaying the massive cost and disruption of a resurfacing intervention.

By minimising the occurrence of cracking, crazing and potholes, RHINOPHALT® provides significant life extension to the surfacing course, thereby delaying the need for major resurfacing interventions.

The overbanding ensures no moisture or water can enter the pavement through the open cracking. Whilst the preservation material will provide some sealing to the surface it does not fill open cracks which is why the overbanding was recommended as an additional treatment, particularly on a more aged surface.

