

# CASE STUDY

## CLIENT

Sumburgh Airport is the main airport serving Shetland in Scotland. It is located on the southern tip of the mainland, in the parish of Dunrossness, 17 NM south of Lerwick. It's incredible location means that passengers are treated to stunning views of the area as they come into land. The airport is owned by Highlands and Islands Airports Limited and served by Loganair.

Sumburgh has many well-known attributes but is probably most famous for its puffin community, which all roost on Sumburgh Head, near the airport.

The airport connects with Aberdeen, Edinburgh, Glasgow, Inverness, and Kirkwall Airports. In the summer there is an additional Saturday service to Bergen, Norway, running from end of May until late August.

## CHALLENGE

Lagan Aviation & Infrastructure Ltd were appointed Principal Contractor for the Sumburgh Runway Rehabilitation project in the Shetland Islands in the autumn of 2022. Although a Lagan Aviation Project, this was managed for Aviation by LAML. The project involved resurfacing of the 06/24 runway and apron Alpha along with carrying out improvements to the existing drainage system.



Working with an experienced supply chain and the LAML team the project was completed on time and within budget.

LAML was contracted by Lagan Aviation & Infrastructure Ltd to carry out the removal of the existing AGL seating pots and backfill prior to the planning and resurfacing works. On completion of the resurfacing, the LAML team reinstated new AGL seating pots into the existing and new locations. Due to the age of the existing sub-structure of the lower layers on the runway shelving and stabilisation had to be carried out before the new seating pots could be set.

In addition, whilst at the Airport, the team carried out surface maintenance works including saw cutting and joint sealing to the existing pavement and carried out overbanding repairs to areas of cracking. The location of the project was remote, with a 12-hour ferry journey from Aberdeen for plant and vehicles, with personnel flying on ahead. Our specialist materials had to be ordered well in advance, with shipment via specialist providers, to ensure they arrived on site ahead of being required.

The unpredictable weather towards the end of the project hampered our progress with shifts being cancelled, but the team pulled together and ensured they met the programme deadline when additional access was granted, working at weekends and switching from night to day shifts to maximise the weather window opportunities. The team experienced some extreme weather, and rainbows too but did appreciate some of the amazing scenery.

## **BENEFITS**

The airport remaining operational is key for the Island so any downtime needs to be minimised. By investing in life extending maintenance solutions such as overbanding and replacing joint sealant the end client is able to reduce disruption and prolong the life of their infrastructure.

Overbanding reduces water ingress into the underlying pavement from cracking. In the colder weather water damage through the freeze thaw effects can cause potholes and surface failure resulting in FOD (foreign object debris) issues. Overbanding helps prevent this occurring. Joint sealing allows the pavement materials to expand and contract due to weather conditions without cracking or damage occurring.