

## WHY DOES IT TAKE EIGHT YEARS?



#### **OVERVIEW**

- · The eight year process
- · Progress update

### **CURRENT AS AT**JUNE 2019

# 1. 11 million cubic metres of pristine sand from Moreton Bay was placed on the new runway site to compress the underlying soils to provide a flat stable base on which to build.

## Why is it taking eight years to build Brisbane's new runway?

Eight years sounds like a long time to build a runway, particularly when many roads, tunnels, bridges and buildings around Brisbane are constructed much quicker.

The critical difference is the ground conditions at Brisbane Airport and the time it takes to build a flat, solid and reliable base on this land.

The new runway is located at sea level on what was historically the Brisbane River delta. As a result the underlying soil is made up of very soft, waterlogged mud and silt.

Every development at the airport has been through a process of engineered compression to form a solid base before building up.

Typically, this involves placing sand (or similar material) on the site to compress the soils below to the required firmness. On the new runway site, this process took four years.

Some areas of the site settled as much as three metres during this process.

Once this process was complete, construction of the runway, taxiways and rest of the airfield commenced.

### Can we build it faster by spending more money or using more resources?

No. Brisbane Airport Corporation (BAC) optimised the ground preparation works as much as possible, including the installation of 330,000 wick drains (the largest wick drain project in Australia) to extract water from the soil as fast as possible.

Commencing the build any earlier without allowing the site to settle would have run the risk of the runway breaking up and having to start again.

### Progress so far:

- Access roads, site compounds constructed, and site cleared of vegetation. (2012)
- 2. 11 million cubic metres of sand was dredged from an approved site in Moreton Bay and placed on the site at varying heights depending on the softness of the underlying soils. It was left to settle and compact over a four year period. (2014-2018)
- 3. The design and layout of the new runway, taxiways, pavements, new aprons and other airport infrastructure was finalised. (2014-2017)
- 4. Construction commenced (2017).
- 5. The new runway is scheduled to be fully operational in mid-2020.