Australia's first Stone Mastic Asphalt Runway

A Project Management Overview
A growing problem

Severe deformations at turning nodes

So let's redo the nodes
When does Project Management start?

- Are we actually working the correct problem?
- Are there other problems we should be working?
- Are we solving it the correct way?
History

• The wearing course was used up

• So the answer must be a dense grade asphalt runway overlay?
Timings where brutal

- Council briefing late November 2019 (Budget increase)
- EOI to market 31 December 2019
- Council decision on 5 February
- RFT out around April calling for detailed designs
- RFT close in May
- Council approval of contract 11 June 2019
- Practical Completion 18 December 2019
Detailed planning

• Level of planning

• The things we planned

• Ran options on:
  • Construction costs of methods, areas, solutions, products etc.
  • Cost of operating the resultant infrastructure, maintenance life cycles and product life cycle cost
  • Timings

Risk based
Contractor choice

• Did not choose the cheapest

• Considered life cycle total cost of the infrastructure

• Looked for a contractor that wanted/needed the job

• Personal connections were very important in building the team
Project team

- GBA – general advisors, putting out fires, independent inspections and investigations

- GHD - PMCA

- Boral – Principal contractor

- Airport Pavement Engineers – technical advisors, independent reviewer, reviewing night reports etc.
The approach

• Got the right team

• Consensus

• Management focussed on member focus, team dynamic and resourcing

• The pavilion vs the scoreboard
Problems:

• I have my own survey thanks.
• You want me to do what?
• You want me to do it by when!
• It is not done that way…
• Why must I do that?
• I am happy with it.
• Why can I not do that.
• You are going to stop me doing …!
• I am done, I am going home.
• Don’t worry about that, it is fine.
Special responses/ innovations

• We started at the top.
• Bespoke flanking mixes.
• Fill before you dig.
• Too much lime make it a lemon.
• Thicker soft stuff or thinner hard stuff.
• Skid control.
• Where do you think you come from?
Significant savings, even though some parts required significantly more work because:

- Discuss once, decide once (at the last moment)
- All hands on deck
- You had one job!
- A numbers game
- It all adds up
- The good, bad and ugly
- What do you want to be famous for?
SMA...
A short video from Boral


And the more general ones about SMA as a runway surface:


