

RECENT EXPERIENCES WITH DRBS AUSTRALASIA

Sydney's Desalination Plant

Sydney's South-West Rail Link Project

George H Golvan QC

Sydney's Desalination Plant

- Joint venture between John Holland and Veolia (Blue Water JV). Principal was Sydney Water. One of the largest infrastructure projects in Australia.
- Constructed on the Kurnell Peninsula near Botany Bay to supply 15% of Sydney's needs. Separate tender for the pipeline across Botany Bay
- Works commenced 2007 completed 2010 at a cost of \$1b for the design and construct component to build 250ML/day plant, able to be scaled up to 500ML/day
- Challenging technically sophisticated project requiring extensive plant and equipment and tunnelling and marine drilling operations. At peak 944 people working on site

Sydney's Desalination Plant



The desalination plant after construction



The 2.5 km long sea water intake tunnel



Seafox 6 self elevating barge



The sea water pumps

The DRB

- A 3 member DRB with 2 party nominated representatives and an independent chairperson nominated by the first 2 members
- Each DRB member was approved by both parties
- Complementary experience and expertise
 - An experienced consulting engineer (Graeme Peck)
 - A senior lawyer with management and consulting expertise in large infrastructure projects (Ron Finlay)
 - A construction lawyer with extensive ADR expertise (George Golvan QC)
- Once appointed each DRB member was expected to be independent and impartial

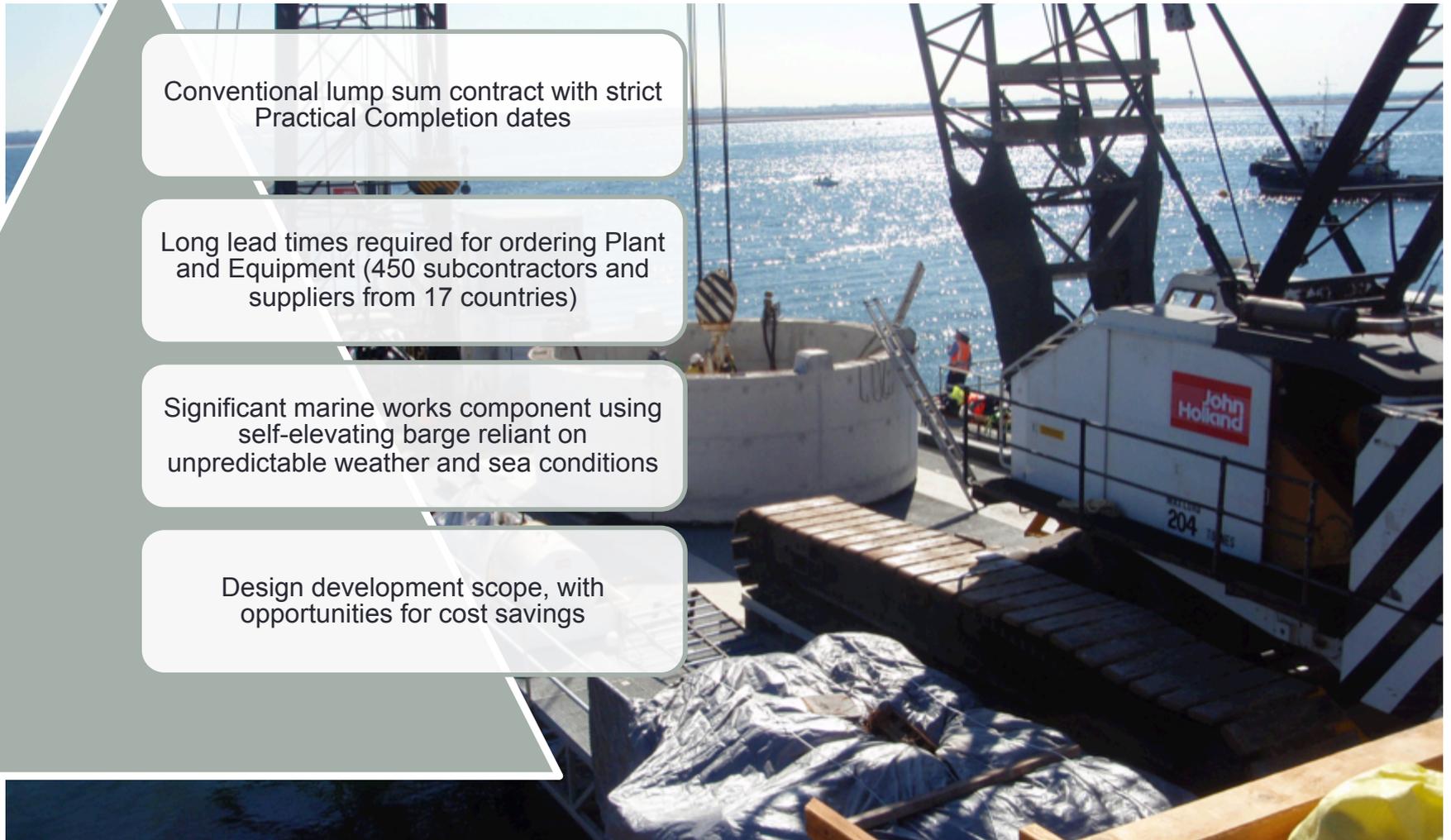
Sydney's Desalination Plant 'Hot Spots'

Conventional lump sum contract with strict Practical Completion dates

Long lead times required for ordering Plant and Equipment (450 subcontractors and suppliers from 17 countries)

Significant marine works component using self-elevating barge reliant on unpredictable weather and sea conditions

Design development scope, with opportunities for cost savings



Remarkable success of the Project

- This complex project was completed on time and under budget with minimal construction hassles and an excellent safety record
- No formal disputes were referred to the DRB or to litigation or arbitration
- The parties maintained excellent relationships
- The project has won numerous awards, including:
 - 2010 National Infrastructure Partnerships Australia 'Project of the Year Award' for Government-Private Partnership;
 - Best Desalination Plant in the World at 2011 Global Water Summit in Berlin

Contribution of the DRB to the project as identified by the parties

- A valuable mechanism for better communications between the parties
- Regular DRB meetings requiring reporting back to the DRB created an impetus to deal with issues before the next meeting
- Questions raised by the DRB enabled underlying issues to be brought into the open and discussed
- Attendance of senior off-site management personnel at DRB meetings made a difference

Cost Considerations

- The costs of the DRB were less than budgeted
- Both parties considered that the DRB was money well spent on undertaking a substantial and complex infrastructure project



- Both parties have either utilised or intend to utilise DRBs on future projects

Why Did the DRB Function Well?

- Close involvement and familiarity with the Project by reviewing the Project documents, regular DRB meetings on-site with key on-site and off site representatives and site inspections
- Developing the confidence of the parties and establishing a forum for frank 'without prejudice' discussions
- Identifying and putting potential issues on the table for discussion
- Focusing on collaborative problem solving without DRB intervention
- A proactive strategy to dealing with potentially difficult issues

An example of proactive dispute avoidance

- Contractor able to propose design changes to achieve better economy in construction without compromising essential design specifications
- Contractor proposed significant design modification which had major financial and time benefits for the contractor but was subject to reservations by the principal, particularly having regard to the need for the plant to be capable of being increased to 500ML at a later date
- DRB recommended:
 - the contractor circulate a technical position paper with physical modeling setting out its position;
 - the principal prepare an Issues Paper in response addressing the commercial and technical implications from its perspective;
 - the parties to meet to discuss and reach agreement
- Potentially divisive issue able to be resolved between the parties in a satisfactory manner with a best for project outcome

South-West Rail Link

- On-going rail project between Transport for NSW and John Holland (cost \$2.1b) commenced in 2011 to Design & Construct a new electrified passenger railway of 12 km with 2 new stations and a train stabling facility.
- Due for completion 2016 due to fast tracking. On site construction has now commenced
- Project includes the movement of 1,000,000 cubic metres of earth, the delivery of retaining walls, five overbridges and seven underbridges, including an underpass beneath the Hume Highway.
- Similar 3 person DRB with diverse skills and expertise
 - Experienced engineer (Graeme Peck)
 - A construction barrister and civil engineer (Steve Goldstein)
 - A construction barrister and ADR practitioner (George Golvan QC)

Concept Map

South West Rail Link



Dispute avoidance strategies used in the SWRL Project

- The DRB has met throughout the Design Development Stage (over 12 months) which has been very beneficial (about to commence meetings on site)
- The DRB has encouraged preparation of joint position papers to address issues or an agreed program for dealing with issues
- At each meeting the parties are required to jointly identify and report on potential Project 'Hotspots' with a colour code:
 - **Red**: significant issue requiring executive management intervention
 - **Amber**: moderate issue requiring principal/contractor mitigation
 - **Green**: watch issue requiring principal/contractor liaison

Some Lessons Learned!

- A DRB in which all members are acceptable to all parties increases trust
- Regular DRB meetings on site and joint reports to the DRB on project progress and potential issues encourages a positive working relationship
- The use of non-technical personnel on DRBs with diverse legal, management and ADR expertise has worked well in Australia
- A DRB should be proactive - by assisting parties to identify and discuss potential issues; not wait for disputes to arise
- The use of joint position papers in which the parties meet and discuss ways to work more collaboratively in resolving issues has proved effective