



# “THINK DIFFERENT” TO QUANTIFY CONSTRUCTION CLAIMS

Queensland is the second-largest and third-most-populous Australian state. Situated in the north-east of the country and known for its tourism, it happens to have one of the richest sources of natural gas in Australia particularly within the Bowen and Surat Basins. This has resulted in many pipeline development projects to ship the gas from source to ports for ongoing distribution and sale. When flooding damaged the construction of one such 540km pipeline, out of the box thinking was needed to quantify the loss.

“Think different.” was an advertising slogan used by Apple in the late 90’s, but you might sometimes wonder whether this should have been reserved for Loss Adjusters. Kevin McElhenny, Chartered Loss Adjuster with Integra Technical Services, suggests that “losses involving large civil contracts often require a different way of thinking to quantify the loss. Damage spread across large areas and the Contractor using the same work crews to carry out the claim reinstatement works at the same time as continuing with normal construction activities. Separating plant, materials and labour costs is problematic.”

Whilst some may point toward the maintenance of detailed timesheets, repair coding and on-site diaries, this may not always be practical. “The volume of paperwork can become unmanageable, for example in one instance the Contractor produced four lever arch files of site records for the first month of works alone” says Kevin.

Without a suitable approach to measuring the loss, the claim can become bogged down in detail leading to significant differences in quantum between the parties and extending claim life. The use of Quantity Surveyors and, perhaps, a Clerk of Works to record and measure the work as it is carried out is one option. With multiple work sites over long distances this can present its own logistical issues.

## **A vast construction area**

Flooding occurring during the construction of a 540km, 42 inch diameter underground pipeline from the Surat Basin to Gladstone in Queensland, Australia required us to think differently - and our approach stood out.

The work sequence involved clearing the ground along the pipeline route to create an even surface, digging a trench up to 6m deep, aligning and welding 12 metre long sections to form continuous sections of pipe, lowering the sections into the trench, backfilling the trench and rehabilitating the ground. Multiple work fronts were utilised to progress the works.

The passage of an ex-tropical cyclone resulted in heavy rainfall and flooding, at a time when the majority of the 540km pipeline was under construction. Multiple work fronts were at different stages of completion, although it was estimated that the project was 75% complete.

The damage included flooding and collapsing of open trenches, scouring of rehabilitated area as well as areas still under construction, erosion of bedding materials installed around pipes in trenches and impact pipelines and their coatings.



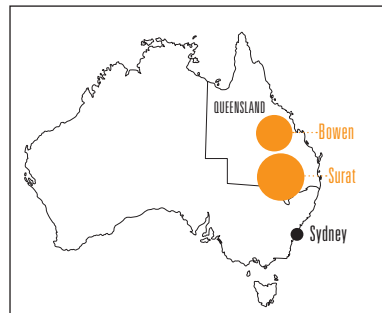
### Mitigating delay in start up

To mitigate delays in the construction, work crews were deployed to both carry out the repairs and then continue with normal construction activities. The repairs to the various types of damage did not require significant plant and labour for each of the numerous locations of damage.

“However, arranging repairs along the entire length of the pipeline and separating the reinstatement costs from the normal construction costs, could lead to standing or non-productive time for the crews when working on the reinstatement works. This would be difficult, if not impossible, to identify and capture” explains Kevin.

A decision was taken to use a helicopter to film the damage along the entire pipeline. Creating this permanent record made it possible to establish a register of the various types of damage sustained before the reinstatement works commenced.

Three Quantity Surveyors were then engaged to accompany the various work crews along the length of the pipeline and record the actual plant, materials and labour (numbers and hours/quantities) utilised for each type of reinstatement works. After a period of three weeks, sufficient works had been observed to identify the typical



plant, materials and labour required for each category. These were then discussed with the Contractor and agreed as required for each repair type.

As Kevin points out “from there, it was a simple case of applying the established rates to produce the cost for each repair type. Having established an accurate record of the damage from the film, it was then a natural progression of establishing the quantum of the reinstatement works.”

Although the cost of three Quantity Surveyors over three weeks may appear to be an expensive option, the cost was less than 0.5% of the reinstatement works. This approach enabled the settlement of this portion of the claim within eight months on an amicable basis and the overall claim within ten months, which was a great result for all parties.