Robert Bird Group

PROJECT OWNERS:
• Hancock Galilee Pty Ltd

START DATE: 2012
COMPLETION: 2014

SCOPE:
To develop a site to be ready for mining within two years of approval

12d DIMENSIONS:
• Mining Infrastructure

Kevin’s Corner Coal Mine
Bankable Feasibility Study

Project Summary
The Kevin’s Corner project is situated in Central Queensland, approximately 340km south-west of Mackay. It is recognised as a high quality thermal coal deposit within the Galilee Basin in Queensland, Australia.

With first coal production beginning as early as 2014, and construction activities planned from late 2012, the project will allow for both high production open-cut mining and underground long wall mining activities to be undertaken simultaneously.

This project is anticipated to employ a workforce of approximately 2500 during construction and 2000 over its expected 30 year operational life. Cost effective engineering solutions were sought to enhance the delivery of the project.

For more information
To find out more about how you can create better designs faster with the 12d Model solution for civil engineering design, visit www.12d.com.

The Challenge
One of the first challenges tackled by the design team was the sheer size and scale of the project. With multiple designers and engineers working on the project simultaneously in different locations to help meet an aggressive schedule, the project relied on a more coordinated, flexible and accurate design model.

For a large project with multiple sub-consultants, specialised service providers and local groups resulting in a sequence of the design iterations and changes were required, to be applied to an entire area of the team without disrupting the tight delivery schedule.

The project owner hoped to achieve the complete design and documentation of the bankable feasibility study by the end of 2012.

The Solution
By utilising the power of Chains, multiple functions could be run in a matter of seconds to allow the team to react quickly to design decisions and changes requested by the client.

The model could be easily adjusted to reflect changes to hardstand heights, flood immunity levels and pavement design criteria in minutes, significantly reducing design effort and costly rework.

The visualisation capabilities of 12d Model allowed the design team working on the MIA to visually assess the location of light vehicle and haul roads being completed by another team and coordinate the location of key mine infrastructure areas seamlessly.

Result
12d Model allowed Robert Bird Group to develop a variety of options, visualise how the various design team components integrated and study more design alternatives, enabling them to deliver a higher quality engineering design more efficiently to the client.
Why Choose 12d?

- Powerful data processing & intelligent functionality.
- Modular, easy to update & completely customisable.
- Seamless integration with major industry software and hardware.
- Used in over 55 countries worldwide.
- Friendly support & training from industry experts.