## **Built Features**

Metropolitan Coal's built features monitoring program includes monitoring of the following infrastructure items:

- Endeavour Energy infrastructure (e.g. transmission line, access tracks and towers).
- Nextgen infrastructure (e.g. access tracks, fibre optic cable lines and pits).
- TransGrid infrastructure (e.g. access tracks, towers and transmission lines).
- Optus infrastructure (e.g. access tracks and fibre optic cables).
- Telstra infrastructure (e.g. access tracks and transmission lines).
- Roads and Maritime Services (RMS) infrastructure (e.g. pavement, bridges, culverts and cuttings).
- RailCorp infrastructure (e.g. rail line and associated infrastructure).
- Sydney Water infrastructure (e.g. pipelines and water tanks).
- Wollongong City Council infrastructure (e.g. pavement and culverts).

Monitoring has been conducted in accordance with the Longwalls 20-22 and Longwalls 23-27 Built Features Management Plans.

Longwall 22 advanced to within 1,000 metres of Bridge 1 in January 2014. Cardno Pty Ltd assessed the monitored bridge movements monthly until the completion of Longwall 22 in April 2014. Bridge movements were also monitored at Bridge 2 following the completion of Longwall 22 extraction. The assessments concluded that there were no differential movements of any concern.

Analysis of measured subsidence was conducted at the end of Longwall 22 by Mining Subsidence Engineering Consultants (MSEC). MSEC concluded that subsidence impacts to built features were similar to or less than those predicted.

No impact to any built feature was evident over the reporting period.

The results of the monitoring have been used to assess the performance of the Project against the following built features subsidence impact performance measure:

Safe, serviceable and repairable, unless the owner and the MSB agree otherwise in writing.

The built features subsidence impact performance measure was not exceeded during the reporting period.

The Project Approval also requires Metropolitan Coal not to exceed the following heritage subsidence impact performance measure for items of heritage or historical significance at the Garrawarra Centre:

Negligible damage (fine or hairline cracks that do not require repair), unless the owner of the item and the appropriate heritage authority agree otherwise in writing.

The Garrawarra Complex is located more than 3 kilometres (km) from Longwalls 20-22 and more than 2.5 km from Longwalls 23-27 and at this distance no measurable systematic or non-systematic subsidence movements were indicated.

The Longwalls 20-22 Built Features Management Plan will effectively be discontinued in the next reporting period since the appropriate built features management for ongoing monitoring have been incorporated into the Longwalls 23-27 Built Features Management Plan.

